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ORIGINAL DEPARTMENT.

LECTURE.

SOME POINTS UPON DEFORMITIES AND THEIR GENERAL TREATMENT.

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Reported by Dr. A. B. Hirsh, Chief of Clinic.

Gentlemen: Endeavoring, as is the essential feature in the teaching of this institution, to avoid as much as possible the merely theoretical in surgery for that which is of direct bearing upon your practice, I will this morning confine my remarks to the general principles involved in managing deformities as a class. Their individual application you shall study in treatment of walking cases in our clinic here, and of bed cases at St. Christopher's and the Episcopal hospitals.

In cases of incipient deformity due to paralysis or paresis of muscles, the treatment should be instituted at once, since the opposing entirely or comparatively healthy muscles will, by keeping the weakened muscles overstretched, prevent the latter's recovering even that measure of contractile power that they otherwise would do. Remember, that a weakened muscle cannot keep up its nutrition, much less increase its strength, when kept constantly overstretched; it works at a great disadvantage, and eventually still further degenerates.

How long after the primary trouble and apparent loss of power can you successfully treat paretic club-foot? The question allows of no definite reply. I cannot say; but, you will remember, for example, Willie M——, whose trouble dated back at least ten years, and where, before tenotomy, some of the muscles *apparently* utterly failed to respond to either current, yet who has now regained a most satisfactory amount not only of electric, but even *voluntary* contractility. In this case we had cut the tendons of the contracture muscles, thus giving the overstretched weakened ones an opportunity to work at a mechanical advantage, and followed it up by massage, electricity, and the use of artificial muscles, which re-educated and prevented the overtiring of the paretic muscles. Artificial muscles (*i. e.*, rubber bands,) arranged as I have shown you, together with shampooing of the affected muscles, hot and cold douches, etc., have in the case of Louis H——, not only *prevented* the formation of club-foot, but have restored much power to the paralyzed muscles. Recognition of the cause of an incipient acquired deformity will prevent much future muscular and osseous change, as illustrated in the two cases I have already shown you.

The treatment of deformities beyond the prophylaxis, which I have mentioned, resolves itself into operations, manipulations, electricity, and the use of certain drugs. The operations resorted to are tenotomy, myotomy, and rupture of bony and fibrous tissues.

The general principles governing the operation of tenotomy are to put the tendon upon the stretch; to enter the tenotomæ flatwise, and to endeavor to make the incision more or less valvular. The instruments must be of the shapes which I here show you, viz., with a convex edge, with a concave edge, both blunt-pointed, and a straight sharp-pointed one. Moreover, the *back of the handles* should have some mark upon them

to enable you to judge in which direction the edge of your blade is aiming when buried deeply in the tissues. In cutting, say the tendo-achillis, you must introduce the sharp-pointed tenotome flatwise on the outer side of the foot, a little internal to the tendon. Having entered it through the skin, its point should be made to freely open the sheath of the tendon. If your blade will not, by direct puncture, make a large enough skin aperture, by using the back of the blade as a fulcrum, this opening may be enlarged. Withdrawing the knife, the probe-pointed one is introduced and carried to the other side of the tendon, which, put upon the stretch by an assistant, is thereby divided on pressing the knife-edge with a slightly sawing motion against the tendon, while the forefinger of the left hand steadies the structures and warns the operator when his blade threatens to perforate the skin. The tendon usually parts with a distinct sensation, and sometimes in older patients with a sound. The knife is now to be carefully withdrawn flatwise, the left forefinger following its track and pressing out any air that may have entered. A small piece of adhesive plaster, either alone or with a compress and bandage, is all that is now necessary. The division of the other tendons can be treated more satisfactorily when operating upon our next club-foot case, since the lecture pretends to deal chiefly with the general principle governing the treatment of deformities.

After dividing the tendons, fascia, etc., what shall we do further? Shall we leave the part in its deformed position, or shall it be at once rectified? The answer to this query depends upon whether we are operating upon a diseased joint or not. If, for instance, as in Johnnie L.'s case, the knee has been long contracted, and after division of the hamstring tendons I had forcibly extended the limb, I should have probably torn the skin across the popliteal space, the tear commencing at my cuts. I might, indeed, in this case have lessened this risk by making my punctures at the inner and outer sides of the knee instead of in the popliteal space, but I still should have run the risk of pumping air into the cellular tissue during my attempts at straightening the limb. Instead, you saw me place the limb in nearly its old position, trusting later to stretching after healing of the wounds—a procedure which I am glad to say has been crowned with success. In club-foot, however, of an extreme degree, after cutting all resisting tendons and bands, immediate forcible manual rectification and fixation with plaster-of-paris bandage will effect wonders, as in Willie M.'s case. Be careful *how* you perform this step, lest you set up suppuration; for, although this is almost unknown, it may follow tenotomy. Finally, when operating upon paretic cases, beware lest you set up the opposite deformity by overstretching, etc., thus converting a varus into a valgus.

The subject of the proper apparatus can be learnt better from seeing such upon the patient than from verbal description. You will understand, gentlemen, that my remarks are merely elementary and general, and that you must and can only learn their special application by clinical experience.

COMMUNICATIONS.

FACTS SERVING TO PROVE THE CONTAGIOUSNESS OF TUBERCULOSIS; WITH RESULTS OF EXPERIMENTS WITH GERM TRAPS USED IN DETECTING TUBERCLE-BACILLI IN THE AIR OF PLACES OF PUBLIC RESORT, AND A DESCRIPTION OF THE APPARATUS.

BY W. H. WEBB, M. D.,
Of Philadelphia.

(*Concluded from page 520.*)

[COPY.]

DEPARTMENT OF WAR,
BERLIN, *August* 31, 1882.

The various detailed reports which, in pursuance with request of November 24, 1881 (No. 157, II., M. M. A.), have reached this Department, have clearly shown that there exists no material difference of opinion regarding the reasons for the high annual sick and mortality rate from consumption during the time of active service.

The universally-acknowledged causative relations will necessarily lead to still greater caution in the treatment and care of those exhibiting the earlier symptoms of chronic pulmonary disease, as well as those in whom a predisposition is suspected or clearly discernible. The prescribed regulations should therefore be borne in mind, in order that the number of consumptives in the army may thereby be diminished. The following instructions must always be carefully observed:

1. Although the predisposition to affections of the lungs cannot be objectively determined, and the time permitted the surgeon during the recruiting service often not extended enough to permit a careful and searching examination, to determine this question, the medical officer in charge is earnestly urged to consider the build, configuration, and exhaustibility of the thorax. In this connection he is to adhere closely to the instructions of April 8, 1877, regarding the normal limitations. Shoemakers and tailors (Oekonomiehandwerkern) of delicate frame require very careful inspection of the chest organs.

When the circumstances attendant upon the recruiting service are not favorable to exact examination, special attention is to be paid to more rigid inquiry when the recruit reaches his regiment, as directed in Par. 13 of the instructions. Here it will be of value, in forming an opinion in your cases, to seek direct official information regarding family history or previous disease of the lungs or pleura.

But in order not to lose sight of those cases which have either been overlooked at the first inspection, or whose character could not then be ascertained, the recommendation of the various corps-surgeons that, with the coöperation of the proper authorities, medical examinations should be repeatedly made at stated intervals, should be particularly borne in mind, with special attention directed to those in whom disease of the respiratory organs is suspected. Special records, carefully noting the condition at each examination, must be kept. The extent to which the weakly are to be spared the arduous work of training must be determined by the requirements of individual cases. The industrious use of douche baths, to harden the skin and accustom to exposure, naturally suggests itself here.

2. The attention of surgeons is directed to the fact that the instructions (Par. 5, Sec. 4, to Par. 7, Sec. 2) do not permit a judgment upon volunteers without considering their fitness for field service. Complete fitness, therefore, is indispensable to a declaration of efficiency.

3. For convalescents from acute disease of the respiratory organs, a prolonged period of after-treatment and care is desirable. If the circumstances of the patient make home attention attainable, and only then, is a lengthy furlough to be recommended. Those returning from such furloughs are to be carefully re-examined, and, if necessary, their transference to the appropriate health resort taken under advisement.

4. That the first symptoms of disease of the lungs may not be overlooked in making the round of the barracks, particular attention should be paid to apparently mild "catarrhs," utilizing, if necessary, evening temperature measurements. Doubtful cases should be transferred to hospital for observation.

5. The opinion of many medical officers, that prompt measures should be taken for the discharge of sufferers from chronic pulmonary disease, should not be forgotten. That even one attack of hemorrhage (Bluthusten), if it is proven to be of undoubted pulmonary origin, is sufficient cause for discharge, and is especially emphasized. That the early dismissal of cases affording no probability of usefulness to the service removes a source of infection for hospital and barrack, must be viewed as by no means the least important advantage of this provision.

Now that experimental pathology has furnished exact scientific corroboration of the theory of the infectiousness of phthisis, more importance than ever must be attached to the separation, both in hospital and barrack, of those afflicted with or suspected of phthisis, from other patients, especially from those suffering with inflammation of the lungs or recent bronchial catarrh. The sputum being the principal carrier of the disease germ, and consequently the principal source of infection, provision for its removal and disinfection (Unschadlichmachung) follows as a matter of course.

In answer to the question raised by this Department, as to whether new measures for the diminution of the number of cases of phthisis, with particular reference to the necessity for the establishment of climatic summer or winter stations for their treatment, were called for, the responses were unanimous against such establishment. The indications for them were considered uncertain, and the existing provision adequate for the present necessities of the army. The Department endorses this view, and is convinced that the careful observance of the general directions herewith transmittted will be of interest and service to the army as well as to the patient. Although tedious attempts at cure by long-continued stay at climatic stations may be considered of doubtful value to the phthisical patient, and not at all likely to furnish the army with a soldier fit for field service, the prompt despatch of a convalescent from an acute non-phthisical affection of the respiratory apparatus to an appropriate station, is warmly to be commended. Such station, from among those at the disposal of the Department, is to be carefully selected, and treatment conscientiously carried out.

This communication, with five copies, is transmitted to you, with the request that you submit your views to the General Commanding, and instruct the sanitary officers of the corps to be guided thereby. [Signed]

V. Lauer-Strube,
Department of War, Army Medical Division.

To all Royal Corps-Surgeons, No. 230, 4, 82, M. M. A.; 64, 9–84, M. M. A.

Like other disease germs, the tubercle-bacilli are carried by the air, and will, of course, be found to be more plentiful in the vicinity of the victims of tuberculosis. A single bacillus may as surely induce the disease as the presence of a great number; and since we are at no time free from the chance of inhaling this germ, our safety lies in avoiding a "predisposition" to lung troubles. In order to determine whether the bacilli might be readily found in the air of the street, or of places of public resort, I had constructed the instruments which I now show to you.

The first apparatus I had made was after the plan of the ordinary inhaler. The long tube passed into a little well at the bottom of the bottle containing glycerine, which was intended to retain any germs carried by the air passing through it; by rotating the bottle its sides were also smeared with glycerine, to give a still larger surface of glycerine for the contact of the air which, after entering the funnel, was forced through the apparatus by using the pump. This was undoubtedly an effective germ-trap, but the impossibility of drying the glycerine, which it was necessary to do in order to obtain microscopic

proof of the presence of bacilli, obliged me to devise another method of obtaining them.

The second trap consisted of a brass cylinder containing a series of snugly-fitted steel discs. Each disc was perforated in such a manner that, when placed together, the openings formed a cone. Between each of these discs, across their openings, thin layers of pyroxylin were placed; the discs were then introduced into the cylinder, which was tightly fastened. To one end of the cylinder the pump connection was affixed, and the other end was connected with the funnel, which was placed over the ventilating flue, to take the air. When the pump was put in motion it drew the air through the apparatus and necessarily through the veils of pyroxylin held in position by the metal discs, the pyroxylin thus serving to intercept the passage of any germs.

With this apparatus I visited a number of places of public resort, and through the courtesy of those in authority I was given free access to the parts of the establishments wherein the exit flues were located. These flues, in all instances except one, were placed in the ceiling of the auditorium and directly over the audience. Here I placed the funnel-shaped extremity of the apparatus and its pump was kept continuously in motion until fifteen or twenty minutes after the audience had retired. This experiment was repeated a number of times at each establishment I visited. The trap was then dismantled; the thin layers or veils of pyroxylin were removed from between the steel discs, and placed in the hands of Drs. E. O. Shakespeare and Morris Longstreth, for microscopic examination. These skillful microscopists have made the following reports:

PHILADELPHIA, February 3, 1885.

Dear Doctor: The specimens of pyroxylin (Nos. 1, 2, 3, and 4) which you sent to me to examine microscopically for the presence or absence of tubercle-bacilli, were variously treated. Nos. 1, 2, and 3 were separately dissolved in a mixture of absolute alcohol and strong ether. The collodion thus formed was handled in either of two ways: *a.* a thin film was deposited on a thin cover glass, such as is used in mounting of microscopic objects, and was stained in the manner recommended by Koch for the demonstration of the tubercle-bacillus; or, *b.* the collodion was excessively diluted in a test-tube, by addition of relatively large quantities of alcohol and ether, and then allowed to stand for some hours, in order that suspended portions might fall to the bottom. The fluid was then carefully drawn off. The sediment at the bottom of the test-tube was mixed with a drop or two of sterilized beef-peptone-fluid, such as I keep in stock for bacteria-culture use, and was spread in a thin film upon a cover glass. This film was also treated in the manner above-mentioned for the demonstration of the tubercle-bacilli. I had, however, considerable trouble in following these methods. There was great difficulty in decolorizing the film; many times this seemed quite impossible.

In these three specimens of pyroxylin I found no bacilli tuberculosis.

No. 4. I determined to treat in another manner. I employed two different methods: *a.* I took portions of the pyroxylin and stained it, as I would do sections of tissue in which I wished to seek for tubercle-bacilli, namely, in the manner recommended and practiced by Koch. Methyl-violet being the color used in the aniline oil mixture. These were subsequently mounted in balsam in the usual way, without converting them into collodion. *b.* Other portions of the pyroxylin were stained with fuchsin as the color of the aniline oil mixture. After staining in the usual way, including the methyl-blue as contrast color, the pyroxylin was placed on an object-glass slide for the microscope and converted into collodion by using a mixture of ether and alcohol. As soon as it was dissolved a thin glass cover was placed over it. This latter method, in my hands, was by far the most satisfactory.

In the portion of pyroxylin prepared by the "*a*" method I found two objects which, by their size, shape, and color, had they been isolated and seen in sputum, I would have taken for tubercle-bacilli; but these objects were attached to fibres of pyroxylin which, in spite of the successive action of weak nitric acid and of strong alcohol, and in spite of the subsequent use of Bismarck brown as a contrast color, was also tinted violet. This observation must, therefore, be classed as negative, or, at least, doubtful.

In the portion of pyroxylin treated by the latter method, "*b*," I found, after painstaking search, one bacillus, which, on account of its size, shape, and quite characteristic color (bright red, the ground being blue), I had no doubt was a tubercle-bacillus. There were two other rod-like forms which in size and shape appeared identical with tubercle-bacilli, but the color which they showed was so indistinct that it could not be safely made out. I have to report, then, the finding of one tubercle-bacillus in the specimen marked No. 4. There were, of course, numerous other objects in all the specimens examined, but as you wished only to know of the tubercle-bacilli, I have thought it needless to particularize concerning them. Yours very truly,

To Dr. W. H. Webb. E. O. SHAKESPEARE.

PHILADELPHIA, February 4, 1885.

Dear Doctor: In compliance with your request I enclose you the following report on the examination of pyroxylin from your germ-trap, in relation to the presence or absence of the bacillus of tuberculosis (Koch).

The material consisted of five small pledgets of cotton, contained in a small phial, sealed with paraffine.

The five portions were carefully kept apart and examined separately.

The staining method employed was that recommended by Koch: Aniline oil and fuchsin, bleaching with dilute nitric acid, washing with dilute alcohol, contrast stain with methyl-blue (in some slides), and washing finally in absolute alcohol.

The only variation made in this method of mounting as usually practiced was in using a dammar medium instead of Canada balsam, which I have employed, since I have found that the dammar hardens more rapidly than the other. The examination of the specimens can be made with the oil immersion lenses more promptly, without the risks involved in displacing the cover glasses, should the oil come in contact with the mounting medium. It was found by a preliminary examination that four of the five specimens of cotton were not likely to furnish any number of bacilli, and the further search among these four specimens was consequently abandoned.

The fifth specimen, labeled No. 1, engaged the sole attention of further examination, as it was composed of the cotton which first met the current of air as drawn through the trap.

The cotton was very much discolored by dust and other matter, particles of which could easily be shaken off from it. Care, however, was observed so as to lose as little as possible of these adhering matters.

The staining, bleaching, and other steps in mounting were carried out by first placing the cotton in a watch glass containing the aniline fuchsin stain and allowing it to remain, tightly covered, for twelve hours. Portions of the cotton were then thinly spread on a cover-glass, and the subsequent steps of the operation carried on in this position. It has been usual, I believe, in examining gun-cotton, to detect the presence of objects capable of being shown by a differential staining, to convert the cotton into collodion by admixture of ether and alcohol. This method I avoided, in the chief examinations, as being essentially faulty, since if the bacilli should be present in a dried film of collodion it would be impossible for the staining agents to come in contact with the micro-organisms buried in the depth of the film.

Very considerable difficulties and much tedious searching were encountered in the microscopic examination, owing to interlacing and overlying arrangement of the cotton fibres. For although the strongest pressure was placed on the covers which the glass would stand—and many specimens were lost in this manner—nevertheless the depth of the material presented a field of much confusion. The confusion was somewhat lessened, but not removed, by adding another step to the process of mounting, viz., by treating the cotton after staining and bleaching with a mixture of ether and alcohol, for the purpose of converting it into collodion. While this treatment dissolved the cotton fibres, still some fibres of flax and wool were left. It did not, of course, help the confusion due to large amounts of dirt particles which were present. It was hoped that by thus making a collodion of the gun-cotton, after the staining process was completed, some advantages might be obtained. Such, however, was not the case. The examination of six slides from specimen No. 1 gave the following results:

Slide a. 1 bacillus, 1 doubtful.
" b. 6 bacilli.
" c. 3 "
" d. 1 bacillus.
" e. none.
" f. uncertain.

It is not intended to convey the idea that these were the only bacilli present. A very careful examination might reveal the presence of more organisms. For the uncertainty of the examination excuse must be found in the nature of the materials dealt with: the impossibility of rendering the layer of material of uniform thickness, as can be readily done with sputa and with sections of tissue; the very large amount of dust particles scattered through a layer of considerable thickness; the facts, also, which I have not seen alluded to previously, that many fibres of cotton have in them clefts which retain staining material in spite of bleaching; many of these clefts closely approach in length and breadth the figures of the bacillus; and, finally, the short time which I have been allowed for the work since the specimens were placed in my charge for examination.

Yours very truly, MORRIS LONGSTRETH.

To Dr. W. H. Webb.

The layer or veil of pyroxylin through which the air from the flues first passed seems to have stopped the passage of all germs and other atoms, and in this way acted as a trap, to the exclusion of the other veils of pyroxylin placed between the discs for that purpose. Unfortunately, the portion submitted to Dr. Shakespeare for examination was not of the first layer, and to this may be attributed his inability to find more than one bacillus.

Furthermore, the number of bacilli found by Dr. Longstreth in the minute particle of the material he examined seems to indicate the presence of vast numbers of these germs in the entire layer removed from the trap.

And now, in conclusion, I desire it to be understood that I have spoken, not so much to maintain a proposition as to reveal the truth; and that in giving you the opinions of those who have beaten a path wherein we may the more easily travel, I have but done justice to a class of men equally endowed as ourselves to observe and to reason from cause to effect. I would also state that the aim of this paper is simply to emphasize facts, leaving you to deal with them as your wisdom may dictate. A careful analysis of the writings and investigations of those who have given special thought to the subject which I have treated, reveals the fact that since the time of Hippocrates there has been a gradual but steady progress towards the grand beacon which now illuminates our way. The very slowness of the advance, the suspicion with which the announcement of every new development has been received, and the earnest criticism to which they have been subjected, insures the safety of our position to-day. Apart from the ocular demonstration of scientific investigations of modern times, and from a purely clinical standpoint alone, the

weight of evidence as to the contagiousness of tuberculosis, must certainly be appreciated by you all. Even those who do not acknowledge it in words, proclaim it by their manifestation of doubt and quiet avowal, that there is something lacking which will enable them to fix upon the cause of a disease maintaining such marked characteristics from age to age, and among all people.

We are living in a scientific age, and the medical profession is thoroughly imbued with its spirit and import. We deal with facts, and are little inclined to give heed to that which is purely speculative. Such superstitions as the "Royal Touch" belong to a departed age. "Coincidences" and "Happened so's" serve no longer to answer our inquiries concerning the causes or nature of disease. Never before have we been so well established in respect to the means and methods of making research and experiments in the domain of medicine, and never before have the searchers after its truths been more earnest in their efforts or more hopeful of grand results. The discovery of the tubercle-bacillus is a scientific fact; all, with the same facilities, may see what others have seen. It is the one thing tangible, describable, known by its peculiarities among entities as readily as one individual is known from another. To doubt its existence in tuberculosis, is to doubt the utility of scientific medical research, and to abandon further progress to the unstable dreams of theorists. The sputa of the phthisical contain these germs; the air they exhale is loaded with them or their spores, and their introduction into the system of animals will always produce tuberculosis *while nothing else will*. These are not speculations, but demonstrable facts! Furthermore, clinical observations go to prove conclusively that healthy individuals, living in an atmosphere contaminated by the phthisical, will contract this disease, and not any other which might be due to a lowered vitality, from being in close quarters and breathing a vitiated air. That there is yet much to be learned in regard to the tubercle-bacillus, there can be no doubt. Still, having made a wide breach in the walls that hemmed in the mystery of tuberculosis, it behooves us to press on to its complete solution.

And, now, Mr. President and Fellows of the College, my remarks on the question at issue are, for the present, at an end; but I feel that I would be recreant to the cause I have espoused did I not avail myself of this opportunity to state that, in more than one instance, in articles recently published, the non-contagionists, it seems to me, have willfully, unhesitatingly, and without warrant, perverted the language, even absolutely falsifying the statements, of authors they quote in support of their cause. That such reprehensible practices should be resorted to, for what must necessarily be but a momentary triumph, is of itself strong evidence of the vulnerability of their position, and requires no word of condemnation from me; nor would I think proper to notice it at this juncture, were it not to point out the necessity for all conscientious investigators to verify every and all citations by referring, wherever possible, to the original documents. And if my feeble efforts have, in the slightest degree, advanced the cause of truth and humanity, my labor has not been in vain. Now—

> "Say as you think, and speak it from your souls."
>
> "What you do
> Still betters what is done."

THREE CASES OF IDIOPATHIC ANÆMIA, WITH REMARKS; AND AN ANALYSIS OF THE CASES HITHERTO PUBLISHED IN AMERICA.*

BY DR. J. H. MUSSER,

Of Philadelphia,

Chief of the Medical Dispensary, Hospital University of Pennsylvania; Pathologist to the Presbyterian Hospital, etc.

In addition to placing on record the three cases of idiopathic anæmia which it was the writer's good fortune to be able to study, the object of this paper is to call attention to the work that has been done in this disease by the medical profession in this country and Canada, and to arrange this work in compact form, for the purpose of analysis and of comparision with the series of cases that have been recorded in other countries. By this means it is hoped the character and nature of the disease, as seen among us, may be more broadly and clearly defined. Furthermore, it seems that the work that has been done has not been sufficiently appreciated in other countries to deem it worthy of the notice of their authors. For, save in but a few instances, they have not at any time referred to our countrymen's labors. It is hoped this subjoined collection of cases, therefore, will show that we are perfectly familiar with the disease, and keenly appreciate its obscure pathology and difficult treatment.

By idiopathic anæmia, it is to be understood, we mean that form of profound anæmia which de-

* Read before the Philadelphia County Medical Society.

velops independently of any organic lesions; which is generally "progressive," and too often "pernicious;" which is characterized by diminution in the number and changes in the appearances of the red corpuscles; by retinal and other hemorrhages; by fever at times; by the absence of emaciation; and the occurrence of extreme fatty degeneration of the heart, and which yields no sufficient evidence after death to explain the cause of the disease. Some authors would have us believe it is only a grave form of chlorosis, or a pseudo-leucæmia of the myelogenic variety, or a grave anæmia not to be distinguished from the secondary anæmias.

We are wanting the time to show the differences between these affections, and will only say we believe that idiopathic anæmia is as capable of distinction, clinically, from other anæmias as is one form of Bright's disease from another, and that, in the absence of proof that the bone-marrow changes are not secondary, it cannot be called pseudo-leucæmia. It cannot be compared, as Quincke would have us do, with uræmia or jaundice. There is something back of these symptoms which is the disease. And, so with idiopathic anæmia; although the blood-changes and the resulting tissue changes are allied in all fatal anæmias, yet back of these are circumstances and conditions which go to make up the different diseases. The application of these remarks is only temporary, for sooner or later, as our knowledge of the blood increases, the fundamental cause of idiopathic anæmia will be determined, and the expression idiopathic will be improper and eradicated. The following cases illustrate well this form of anæmia:

Case 1.* Idiopathic anæmia; no organic cause; no emaciation; retinal hemorrhages; reduction of r. c.; analysis of blood and urine; fatty heart.

K. McC., fem., white, æt. 42, was born in Cumberland Co., Pa. She resided in this county until 16 years old; since then she lived in Philadelphia until her death, with the exception of a few months spent in Harrisburg, Pa. Previous to her marriage, which took place at 17, she led a life of ease; since then, however, although her duties were those of housekeeper only, she worked very hard. Her first husband lived eight years after their marriage; he died of chronic Bright's disease. After an interval of six months she remarried, and has since lived with her husband. She became pregnant once only by her first husband, but lost her child by premature labor; she never conceived thereafter.

Mrs. McC. never suffered on account of deprivation of food or life's ordinary comforts; her last husband kept a saloon, and was of somewhat dissolute habits, so that this latter period of her life had been one of care and anxiety; her habits, as far as can be ascertained, were good.

The father of our patient died of an acute illness; the mother is living at seventy-two, and quite active; her brother and two sisters are likewise in good health; there has been no hereditary tendency to disease.

A woman of considerable personal beauty and fine physique, she never had been sick until the development of the present illness. It is true, in childhood she had the specific fevers incident to that period, but the attacks were light and never followed by serious sequelæ. She never had malaria, and no knowledge of venereal disorder could be obtained. Menstruation had always been regular, though scanty and painful, and she believed the "change" had taken place one year previous to this note, attributing a parasthæsia to that cause. Within the year she menstruated twice, the first time seven months ago, the last time four months ago; the latter period was attended by a rather profuse flow.

The cause of the breakdown in Mrs. McC.'s health was attributed to shocks which occurred five years prior to her death. Her husband, while under the influence of liquor, abused her frequently, and once was about to kill her but for timely interference by friends. For many weeks afterwards she suffered the highest degree of mental excitement, so extreme at times, it was feared insanity would ensue. Thenceforth her health was poor, and gradually the anæmia developed.

The course of the disease can, it appears, be divided into three stages or periods. The first period continued from the time of the shock until about one year previous to the time she came under my care, or January, 1881; the second period continued from January, 1881, until about December, 1881; she then became so ill as to be unable to leave her bed, and came under my observation in January, 1882; this third period was of seven weeks' duration, and terminated by her death, January 19 of the latter year.

The first period was marked by ill-defined poor health. She knew that she was losing ground, but could not tell how. She did not emaciate, but weakened. She lost her hair, and it changed from a brown color to an iron-gray.

* Abstract Case in Trans. Path. Soc. of Phila., xi., p. 66.

The symptoms of the second period were more defined. They were change of color, of disposition, of strength, etc. The complexion—originally clear, with rosy cheeks—became sickly and dirty yellow. She became irritable, fretful, and morose, contrasting with her previous good disposition. In the early part of this period, she had an attack of daily intermitting fever, with headache, lasting ten days. She lost her appetite; or if present, it was quite capricious. In February and March (1881), attacks of vertigo, faintness, and vomiting, occurred twice or thrice daily; consciousness was never lost in them; they occurred after exertion. Failure in strength became more and more pronounced towards the close of the year; inaptitude for exertion, either mental or physical, and a growing heedlessness of friends and surroundings, became marked. From the first of this period, numbness and tingling, and an increased sense of weight in the limbs, were noticeable and distressing.

The third period of illness of our patient was marked by extreme exhaustion. On account of sheer prostration, of palpitation of the heart, and extreme dyspnœa on exertion, she was obliged to take her bed.

In addition to the preceding history, the following notes of her condition were gathered during the three weeks of my attendance:

External Appearance.—Hair soft, thin, iron-gray. Eye-lashes and eyes brown; eye-lids puffy; conjunctiva pearl-white color; subconjunctival fat increased, especially in inner canthus, and quite icterode in hue—at first sight, considered to be due to bile pigment. Face not emaciated; appearance strikingly ghastly and wild; color, dirty-yellow or earthy. Lips pale. Appearance of extreme bloodlessness of face and hands. The latter not pigmented. Finger-nails grew rapidly, but were brittle, and had white spots on them. Skin warm and oily; that of the hands wrinkled, and in the palms hard. Ankles and feet slightly œdematous. Body not emaciated, though not as plump as in early years. Muscles flabby. Mammary glands well-developed.

General Symptoms.—Prostration; general aching, especially aching of the muscles of the neck; frequently said, "Feels as if head were separated from body." Marked tenderness on pressure of ribs and lower part of sternum. At nights, a moderately profuse perspiration occurred. Temperature recorded usually once daily, often morning and evening; the average was 98½° for the a. m. and 99½° for the p. m. temperature. Towards the end of life, coldness was complained of bitterly, and the extremities were quite cold. Extreme restlessness was observed the last days of patient's illness, especially tossing of arms and rolling of head.

Cerebro-spinal Symptoms and Alterations of Special Senses.—Mental faculties clear, but acts sluggish. Slow responses made to questions, and the recalling of events almost impossible. Towards the close of life, readily lost the thread of any discourse, and mind wandered. The delirium was low and muttering, and attended with emotional displays; at times crying, then laughing gayly. The delirium first developed acutely six days before death, preceded by an attack of semi-consciousness, and accompanied by thick, indistinct speech. The slight loss of consciousness was of four hours' duration, and was followed by headache. Three days preceding death, an attack of aphasia of a few hours' duration occurred. The last day of her illness, stupor was marked. Noises in the head, throbbing sensations, and ringing of the ears, were distressing for many weeks. She first complained of disturbed vision, January 2. Muscæ volitante were constant, feeble and double vision marked. An ophthalmoscopic examination, January 11, 1882, by Dr. G. A. Piersol, showed the following:

Right Eye: Disc pale, its inner and lower margin indistinct; entire retina slightly cloudy and hazy; vessels of eyeground abnormally pale; arteries on disc and throughout their course reduced in size; veins engorged, but of pale color; near disc, to inner and lower side, several small hemorrhagic spots, bright red. Refraction hypermetropic; media clear.

Left Eye: Disc pale, with some haziness, especially on nasal side; slight veil over entire fundus; vessels abnormally pale, arteries attenuated, veins congested; numerous hemorrhages in form of small streaks along course of vessels to nasal side of disc; large, yellowish-white, irregular patch, with several small hemorrhagic patches about its margins. Refraction hypermetropic; media clear.

Gastro-Intestinal Symptoms.—Tongue generally furred. teeth good, mouth dry and sticky or pasty; a thick, viscid saliva constantly discharged. No hemorrhage from gums, but during the three days preceding death, sordes collected on teeth, tongue, and lips. Mucous membrane of mouth pale; no bronze patches. Pain and tenderness in the epigastrium, with pulsation of abdominal aorta. No nausea or vomiting. Loss of appetite. Pain and some slight flatulency after tasting food. Bowels always constipated.

Spleen and liver normal in size. Abdomen not scaphoid.

Pulmonary Symptoms.—Dyspnœa, which was an early symptom, became agonizing; at first on exertion, it became marked in the recumbent position also. Attacks of dyspnœa occurred frequently. Sighing was constant, but Stokes-Cheyne respiration never present. The respirations the first week were twenty-five to thirty per minute; the last two days they were forty, due to an œdema of the lungs, which gave the usual physical signs: otherwise the lungs were normal.

Circulatory Symptoms.—Cardiac palpitation on the slightest exertion or emotional disturbance, and attacks of syncope were frequently complained of. The pulsations of the large vessels were annoying. On physical examination, apex beat of heart in normal position, scarcely visible impulse, or impulse detected by palpation. Carotids throb visibly in neck; veins pulsate; aorta at sternal notch readily felt. No cardiac or vascular thrill. No increased area of cardiac dullness. At apex of heart, at pulmonary and aortic orifices, loud systolic murmurs. The murmurs at aortic cartilage heard also in carotids. Loud venous hum in jugulars. Pulse small and compressible, not over 80, until day preceding death. No hemorrhages were known to take place in any part of the body save retina.

Examination of Blood.—Secured with difficulty by puncture, liquid and pale in color. On microscopical examination, red corpuscles diminished in number; no rouleaux formed; innumerable small corpuscles, dark in color, and appearing like oil globules (microcytes); most of the red cells are flat, some float on their edge; size varies from the microcyte to the normal red cell. No large or nucleated corpuscles seen. With Gower's hæmocytometer, 715,000 red and 15,000 white cells were found per cm. Color of cells paler than normal.

Genito-Urinary Symptoms.—None were noticed save the passage of an abundance of urine, and, the last four days, of its passage involuntarily. Urine of January 4, analyzed by Dr. John Marshall:

Sp. gr., at 15° C.		1014
Urea	2.3	per cent.
Sodium chloride	.12	per cent.
Phosphoric acid	.13	per cent.
Uric acid	.087	per cent.

No albumen or sugar.

Urine, January 6, pale red color, normal odor, acid, sp. gr. 1010. Scarcely any sediment; on microscopical examination contained pus-corpuscles and granular matter.

Autopsy, sixteen hours after death, assisted by W. E. Hughes, M. D.

Body of a large-framed woman. Not much, if any emaciation; panniculus adiposis well developed over abdomen. Skin extremely pale, with earthy hue of face. Petechiæ on back of hands and upper surface of feet. No post-mortem staining. Rigor mortis well marked. No enlarged superficial glands; scar of an old suppurating one in groin. No cadaveric odor.

Brain.—Not examined.

On section, muscles normal color. Large layer of bright yellow fat over the abdomen. Abdominal organs occupied normal relations. The omentum covered and contained its usual amount of fat. The small intestines were much contracted; the colon filled with fæces. The stomach occupied its normal position and contained gas. The mesenteric glands were somewhat enlarged. The thoracic cartilages were not ossified, and on breaking the sternum a dark red grumous fluid exuded. The right lung was bound down at the apex by adhesions, while in the lower part of the pleural sac there was one-half pint of serum. A calcareous mass was felt in the apex of the left lung. Both lungs were œdematous.

Sympathetic System of Nerves.—On account of the bloodlessness of the organs and the small amount of discharges, the nerves were very distinctly seen—both filaments and ganglia. On microscopical section, the ganglia were normal, a slightly granular appearance of the nerve cells and some pigmentation of them and the nerve fibres alone being found.

Heart and Blood-Vessels.—Pericardium healthy; sac contained usual amount of serum. Underneath parietal and visceral layer, small ecchymoses. In pulmonary vein, black clot; in aorta and pulmonary artery, a soft yellow clot; in the venæ cavæ, soft red-brown clots with black specks or granules intermingled. The heart was pale, soft, flabby, extremely fatty. The degeneration was more marked on the right side; along the septa and the vessels there were areas of capillary injection. The right auricular wall was very thin, strands of muscular fibres being replaced by fat, while other strands seemed to be destroyed, so that parts of the wall were transparent, connective tissue forming the limiting membrane. The left side was similarly affected, but not in so intense a degree, there being only a diffuse yellowish discoloration. The papillary muscles of both sides were markedly changed: the fatty change was recognized by innumerable yellow dots. The right heart contained soft semi-

fluid, red blood clots; the left soft yellow clots. The aorta was a centimetre in width at the heart, and at the cœliac axis admitted the little finger only.

Organs of Abdomen.—Liver, enlarged in both lobes, with thickened edges; innumerable small ecchymoses underneath the capsule, especially along edges; fatty mottling of surface; on section, the organ was bloodless, the veins gaping and empty, markedly fatty to the naked eye—corroborated by microscopical examination.

Spleen, normal or but slightly enlarged; surface rough; on section, dark brown and hard. *Pancreas* apparently normal.

Stomach, slightly dilated, filled with mucus and liquid food; some mammilations and numerous submucous extravasations; pyloric orifice much contracted. *Supra-renal* capsules normal; on microscopical examination, a slight increase of interstital tissue with lymphoid infiltration was seen; vessels engorged with blood; cells pigmented and slightly infiltrated with fat.

Diaphragm, very thin, and to the naked eye, fatty; in parts, apparent streaks of fatty degenerated fasciculi were observed.

Genito-Urinary Organs.—Uterus and *ovaries* normal; left *kidney* enlarged, removed readily on account of the absence of fat around it; capsule adherent, and on section cortical portion pale yellow or granular, and of narrow width; pyramidal portions very pale or yellow-white; right kidney more congested than the left; otherwise, appearance about the same; pelves of both kidneys filled with fat; bladder full; mucous membrane pale.

Bone Marrow.—Some removed from radius and sternum; the marrow of the radius was pale yellow in color, and on microscopical examination, revealed the appearances of healthy adult marrow; the same may be said of the sternal marrow.

Blood.—Twenty-four hours' standing in a beaker did not cause clotting; in the bottom of the beaker a thin red film was seen, of coagulated matter; microscopical examination revealed the same changes found during life. Chemical examination by Dr. John Marshall, Demonstrator of Chemistry, etc., University of Pennsylvania. With the record of the examination is added the results of the examination of the blood of healthy females for comparison. It will be seen there is a diminution of the amount of albumen in our case, there being 11 parts in the 1000 less than in health. Inorganic salts, including iron, exist to the amount of 7.15 parts in 1000 in health; fatty matter, extractives and salts are represented by 9.01 parts per 1000; deducting the former from the latter figure, leaves 1.86 parts to represent the amount of fats and extractives. Our analysis shows an increase of these constituents to 2.18 parts. An increase is also seen in the inorganic salts; salts and iron equal 7.15 parts, iron equal .54 parts—the remainder, 6.60 parts, equals the amount of salts per 1000 in health; an increase of .64 parts is seen in these constituents, therefore (7.24—6.60=.64). As would be expected, the greatest change is in the amount of iron; analysis shows that .54 parts in 1000 represents the amount of iron in the normal blood on an average. Dr. Marshall found but .18+ parts in this case, or a reduction of two-thirds. The fibrin in our case was increased, a circumstance contrary to what would be expected or had been reported. A study of the many tables that Coupland presents in his admirable lecture, shows that the amount of this constituent is an extremely variable factor.

(*To be continued.*)

HOSPITAL REPORTS.

LECTURES ON INSANITY.

Delivered at the University of Pennsylvania,

BY CHARLES K. MILLS, M. D.,

Lecturer on Mental Diseases in the University of Pennsylvania; Consulting Physician to the Insane Department of the Philadelphia Hospital; Neurologist to the Philadelphia Hospital; and Professor of Diseases of the Mind and Nervous System in the Philadelphia Polyclinic.

Reported by WILLIAM H. MORRISON, M. D.

LECTURE III.

Mania—Definition of Mania—Varieties—Cases—Diagnosis from Diseases not Psychoses—Prognosis—Treatment—Attendants, Food, and Air—Baths—Bromides—Chloral—Cannabis Indica—Conium—Hyoscyamia and Hydrobromate of Hyoscine.

GENTLEMEN: Mania is a form of insanity characterized by extreme mental exaltation, particularly in the sphere of the emotions. In mania the patient loses self-control, and usually has insane delusions or delusive ideas. The mental exaltation shows itself in excessive emotionality, in over-ideation, and often in physical excitement or violence. The ego expands. The brakes are off, and the mind runs riot for the time being.

The term mania should not be used loosely, as it is sometimes, to indicate insanity in general, or almost any form of insanity, but should be applied only to cases in which emotional exaltation is the dominating feature.

Mania can be conveniently subdivided into four forms, as follows:

1. Common acute mania.

2. Acute delirious mania.
3. Acute transitory mania.
4. Chronic mania.

Common acute mania is the form most frequently seen in practice. It is a condition in which the patient has, comparatively speaking, a moderate amount of morbid exaltation. This may, and frequently does, take the form of gay or joyous emotion. The patient may laugh, or crow, or shout, or dance. In other cases the symptoms may assume a sorrowful, or a destructive and dangerous form. An exaggeration of all the immoral and mischievous peculiarities of the individual may then be exhibited.

In acute delirious mania, the maniacal manifestations exist in the most violent form. Here, the patient is thoroughly incoherent; he is never still. Wild volubility, violent gesticulation, restlessness which is incessant, filthiness of the vilest character, rapid pulse, elevated temperature—these are the features of this frightful disorder. It is the "raving mania" of the popular mind, but a much rarer disorder than the people generally suppose. Sleeplessness is of such a character that nothing will control it. Patients frequently die, who have not slept for days or even weeks.

In acute transitory mania, the patient up to a certain time is in comparatively good health, when suddenly—it may be with cause or without apparent cause, an attack of mania ensues. Exposure to the sun will sometimes cause this form of mania, instead of producing ordinary sunstroke. The storm soon passes over, leaving the patient apparently well. Acute transitory mania never lasts longer than from one to two days, and may last only a few moments or an hour or two. Lasting beyond a day or two, it would properly receive the designation of common acute mania, or if violent enough, of acute delirious mania. The existence of such a form of mental trouble has been denied. You can at once see the importance of this from a medico-legal aspect. It has been denied in some famous trials, both in this country and abroad; that is to say, in cases of homicide, the defense of acute transitory mania has been made, and the existence of any such form of insanity has been scouted. The best alienists, however, agree that there is such a form of insanity.

In epilepsy, not infrequently attacks of acute transitory mania occur. A form of insanity sometimes precedes the paroxysms of epilepsy, another sometimes follows the paroxysm, and occasionally epileptic patients will be seen who have sudden outbursts of terrible mania, in which they become dangerous and uncontrollable. These are supposed to be scientifically what are termed psychical equivalents of the motor-epileptic attack, that is, the patient has a mental epileptic paroxysm instead of a motor convulsion.

Acute transitory mania is not, however, necessarily epileptic transitory mania. I refer to these epileptic insanities simply to illustrate. I believe in a disease independently of epilepsy, in which the patient is stricken with maniacal excitement which passes away in a few hours.

Some confusion exists in the minds of physicians in regard to the form of insanity known as chronic mania, which confusion has arisen partly from the way in which, for convenience sake, cases have been labeled "chronic mania" in asylums. Up to a recent date, and even yet in many institutions, nearly all of the asylums had a very simple way of classifying their cases of insanity. The cases were all classed under the heads of mania, melancholia, and dementia, with probably some few special forms. Under the head of mania were placed certain cases which could not conveniently be assigned to any of the other classes, just as doctors, not alienists, sometimes find it convenient to label cases "marasmus," or "biliousness," or "neurasthenia," when they cannot think of anything better to call them. The term chronic mania should, however, be applied to a certain series of cases which show a persisting mental condition of moderate exaltation, with intervals at least of greater excitement. These cases are probably cases of chronic delusional monomania of the ambitious type. Cases of chronic melancholia, and some of the milder forms of dementia, are not unfrequently placed under the head of chronic mania. The term should be restricted to those cases in which some marked emotional disturbance persists for years—for eighteen months to two years at least. In the majority of instances, the term should be applied to cases of a secondary form, that is, those in which the disease began as acute mania. Chronic mania usually passes eventually into dementia.

Spitzka, some years ago, in a journal article, considered it necessary to describe a distinct form of chronic mania, as chronic mania with imbecility; but in his recent text-book, he does not make of this a separate class.

A good illustration of common acute mania was A——, aged forty, admitted to the Philadelphia Hospital with a broken femur. The mania developed almost suddenly a few days after the accident. The broken leg complicated, and yet, perhaps, also simplified his treatment, as it made it absolutely necessary to use restraint, both mechanical and chemical, as well as to give the patient the closest personal attention. He was a moderate drinker, and a man of fair intelligence. He slept little, but was not absolutely sleepless. He was constantly, when awake, in motion with his hands, if they were not confined. He made frequent efforts to masturbate. He talked and shouted. He was usually joyous and good-humored, although at times profane and obscene beyond description. Any one coming into the ward or speaking to him was greeted with shouts, or oaths, or obscene jokes. He would crow like a rooster by the half hour; then laugh, or scream, or sing, or swear. He never complained of pain in his leg, or elsewhere. He paid no attention to his evacuations. When at his worst, his pulse was frequent, and his temperature slightly elevated. Fortunately he could be fed without much difficulty. Bromide of potassium and chloral, and fluid extract of conium were the drugs chiefly relied on in his treatment. He made a good recovery, both from the fracture and mania.

Not long since, I was called in consultation to see a case which, beginning as one of common acute mania, rapidly passed into true delirious mania. The patient was a young woman of excellent character, twenty-five years old. She was a little odd and excitable for two or three days,

and then became maniacal. When I saw her she was in bed, talking or laughing and screaming incessantly. Every now and then she would leer and wink. She was at times vulgar and profane, although when well always exemplary, both in conduct and language. She would often pick up the last few words of anything that was said, and repeat them over and over again, sometimes with a little variation. For a time, she would continue shouting the same phrase, as "Don't you know?" She showed some tendency to rhyme, repeating such expressions as "Cricket, that's the cricket, and the ricket." She was continually tossing about, jumping up and down, if allowed. She had no fever. Bromides and chloral did little good. Hyoscyamine controlled her for a time. I saw her but once, but learned that she died from exhaustion, after changing physicians two or three times. She would possibly have done better in a hospital, with trained attendants and an unwavering plan of treatment.

In 1883, a colored man, 30 years old, was admitted to my wards in the Philadelphia Hospital. He had been brought to the hospital from a station-house, to which he had been carried the day before, naked and bound hand and foot. At the station-house he was unconscious of his surroundings, and even for an hour or two after admission to the hospital he was in a half-dazed condition. He could not give any clear account of himself, except that he had been all right the day before, but during the evening or night something had happened to him. His friends stated that he had suddenly gone "entirely out of his head." In the seizure he was incoherent and violent, biting, striking, and screaming. He had to be seized and held, to prevent him injuring himself and others. His clothes were torn from him in the struggles to restrain him. About one year previous to this attack, he had had a similar outbreak of great violence, and also a few weeks later a slight attack. He had some dull headache the day of admission to the hospital. When a child seven years old, he had had a convulsion; but there was no other history of epilepsy. He had not had attacks of petit mal. He remained under observation several weeks, perfectly sane, and not showing any signs of epilepsy.

This case may be regarded as one of acute transitory mania. The occurrence of these seizures and the history of a fit in childhood would give color to the idea of an epileptic origin. I believe, however, as I have already said, in the existence of a transitory mania not epileptic in character; but I regard it as a rare affection.

In our visits to the State Hospital for the Insane at Norristown, and to the Insane Department of the Philadelphia Hospital, I have shown you a number of cases of what might be properly termed chronic mania. These patients, as a rule, do not sleep as well as others of the chronic insane. They are restless; sometimes raving and quarrelsome. They have spurts of mental exhilaration and motor activity. Under the excitement of visits from strangers, they sometimes become more excitable and aggressive. They may have hallucinations and delusions, but they are usually imperfectly expressed and wanting in systematization.

It will not be in place to say anything about the differential diagnosis of mania from other forms of insanity, until other mental disorders have been considered.

Mania, however, is sometimes confounded with other forms of disease not insanities, such as cerebral meningitis, acute alcoholism, the incipiency of typhus or typhoid fever, hydrophobia, etc. In meningitis, sooner or later some of the following symptoms will appear: headache, fever, vomiting, vertigo, photophobia, cutaneous hyperæsthesia, spasm, paresis, increased reflex excitability, respiratory affections, and disturbed consciousness. Mistakes are only liable to occur through the violence of the delirium masking the other symptoms of meningitis. In acute alcoholism, tremor and peculiar hallucination of sight and hearing will usually be present, to help, with the history, to decide the diagnosis. In one case of typhus, and in two of typhoid fever, almost typical maniacal symptoms were the first manifestations. This, I believe, is rare; but it should be borne in mind. I am satisfied that a few of the cases reported as hydrophobia are really examples of either acute mania, or hysterical mania.

It is sometimes important to distinguish mania from the simulation of insanity. Mania and dementia are the forms of insanity most likely to be selected by the simulator. The mania will be overdone for a short time; but the sleeplessness and excitement cannot be kept up without cessation for days and weeks.

Many cases of common acute mania recover. Most cases of acute delirious mania die. Cases of acute transitory mania usually recover, and most of the studied cases have had but one attack in a lifetime. Cases of chronic mania commonly pass into fatuity.

Acute mania can be treated at home, if well-trained nurses, and suitable accommodations can be had. In nine cases out of ten, members of the family will not answer.

Strict attention should be paid to the diet and amount of nourishment taken by maniacal patients. While such patients are not usually in as much danger of starving as melancholiacs or stuporous cases, they sometimes refuse food, and thus add to the danger of exhaustion from over mental and motor activity. Food in such cases, owing to the troublesome character of the disorder, is likely to be taken irregularly both as regards time and quantity. The physician should see to it that a certain definite amount of nourishment is given every day. Even forcible feeding, by means of tubes passed either through the nostril or mouth, should be resorted to if necessary. Speaking of cases of acute mania, Clouston says: "To show the quantity of food that such patients can take and digest, I mention that at the asylum I am never satisfied except the bad cases get at least six eggs a day, beaten up in liquid custards, in addition to their ordinary food, beef tea, etc." Milk, beef tea, soups, rice, etc., are useful.

Patients must not be deprived of fresh air. In delirious cases the rooms must be well-ventilated. Other patients should be taken out of doors whenever possible. Baths, preferably warm, or warm baths with cold to the head, do well in some cases.

Bromide of potassium and chloral, in doses of from 20 to 40, or even 60 grains, and bromide of

potassium, with tincture of cannabis indica, are two valuable medicinal combinations for insomnia and delirium. Tonics, such as quinine and iron, must be used sooner or later in all prolonged cases.

Both in private and hospital practice, I have found conium used after the method recommended by Kiernan* and others of great value. A reliable fluid extract (such as Squibb's) should be used. If it can be had, the alkaloid conine, or one of its salts, may be tried. The ordinary dose of the fluid extract of conium in non-maniacal cases is from three to five minims; but in acute mania, if no special contra-indications are present, a dose of from fifteen to twenty minims, or even more in rare instances, may be given; and subsequently the patient should be kept under the influence of the drug, five to ten minims, being administered every one, two, or three hours. Conium has a very marked effect in subduing motor excitement; and insomnia and delusions also sometimes disappear during the time it is being taken.

In the case of a young lady brought to me from the interior of the State, I gave the fluid extract of conium for four weeks with the happiest effects; at first in large doses, but gradually diminishing, using enough, however, to keep the patient continuously under the influence of the drug. The only other medicine employed was bromide of potassium, in doses of thirty grains at night, and this only a few times. A full quantity of food was given, sometimes force being required both to give food and medicine. The patient entirely recovered.

In another case of common acute mania, not as severe in type as the one just alluded to, the patient was given four to six times daily a prescription containing bromide of potassium, grs. xxx.; fluid extract of conium, ♏ vij., and Fowler's arsenical solution, ♏ ij., the formula being similar to that used by me for epilepsy, except that the conium was given in larger doses than is usually ordered for epilepsy. Strict attention was paid to feeding. This patient also recovered.

During the last few years, hyoscyamia or hyoscyamine has been much used in the treatment of acute mania. I have used it in private practice, and have observed the effects of its administration in two public and in one private hospital for the insane. In cases not too much reduced in strength by disease, it is of value in calming maniacal excitement. One strong objection to hyoscyamine as usually sold is its somewhat uncertain strength; an amorphous alkaloid is generally employed. It has been used both by the mouth and hypodermically, in doses varying from the $\frac{1}{10}$ to the $\frac{1}{100}$ of a grain.

Hyoscine is an alkaloid derived from amorphous hyoscyamia. The results of some physiological and therapeutical experiments with one of the salts of this alkaloid—the *hydrobromate of hyoscine*—have recently been published by Dr. H. C. Wood.† Physiologically he concluded that hydrobromate of hyoscine acted on mammals "chiefly as a spinal depressant; that it is a centric, respiratory depressant, causing death by asphyxia; that it has very little effect upon the circulation, what influence it exerts being in the normal animal set aside by the asphyxia it produces; that it does not paralyze the pneumogastric; that in enormous doses it paralyzes the vaso-motor system; that on the heart itself its influence is very feebly depressant." In brief, it may be stated that therapeutically it was found useful, either by the mouth or hypodermically, in doses of $\frac{1}{50}$ to $\frac{1}{100}$ of a grain in cases of mania, or in the maniacal stage of other forms of insanity.

I have recently observed the happy effects of hydrobromate of hyoscine in three cases, two of acute mania, and one of melancholia agitata. In two of these cases it was given hypodermically, and in one by the mouth. The doses used were the $\frac{1}{75}$ and the $\frac{1}{100}$ of a grain. Until we have more reports as to its effects, it will not be wise to go beyond these doses.

*Journal of Nervous and Mental Disease, October, 1883.

†Therapeutic Gazette for January and February, 1885.

Medical Societies.

PHILADELPHIA CLINICAL SOCIETY.

Stated meeting, March 27, 1885. The President, Dr. Edward E. Montgomery, in the chair.

Dr. Edward R. Stowe reported a case of

Laryngeal Diphtheria; Tracheotomy; Recovery.

Healthy male child, aged twenty-two months; seen on the second day of disease.

Conditions.—Moderate fever and malaise; cervical glands enlarged; fauces, uvula, and tonsils covered with grayish-white membrane.

Evening of Third Day.—Voice was husky, but no difficulty in breathing.

Fourth Day.—Symptoms of laryngeal stenosis developed rapidly, with beginning cyanosis and stupor. Symptoms not relieved by an emetic. Early in the afternoon tracheotomy was performed by Dr. E. E. Montgomery, with no more difficulty than necessarily accompanied operation on a short neck and deep trachea. There was no hemorrhage and no important structures were disturbed. A large Trousseau tube was inserted and covered with gauze. With the exception of slight fever for three days, the case progressed steadily to recovery. Tube was removed on the fourteenth day, and the sinus rapidly closed.

Treatment.—Full doses of corrosive sublimate (gr. $\frac{1}{20}$) with tinct. ferri chlor. and potass. chlor. every two hours; gr. vj. quinia in suppos. daily, with large doses of whisky (℥iv. in twenty-four hours) in milk. After tracheotomy, the room was kept at 80° C; atmosphere moistened by the almost constant use of carbolic acid and lime-water in steam atomizer. Insufflations of sulphur were frequently made to throat. Tracheotomy tube was removed and cleansed daily, and on the fifth day after operation was replaced by a smaller tube to allow air to pass around it. At each daily dressing the wound was closed with the finger, to force the patient to draw air through the larynx.

Points of interest:

1. Tender age of child.
2. Good results of an early operation.
3. Perseverance in the use of remedies directed against the diphtheria after the operation.

4. The undoubted good results of large doses of whisky.

5. The probable benefit of corrosive sublimate as a remedy for diphtheria.

6. The advantage of inserting a large tube.

7. The use of the tube for a longer period than usual (two weeks).

8. The relief afforded by the use of the steam atomizer in moistening the air-passages and facilitating expectoration.

Dr. Stone also reported a case of

Intestinal Obstruction from Probable Intussusception.

Female child, aged two years and eight months.

History.—Some diarrhœa for three or four days before attack; swelled abdomen, with passage of bloody mucous alvine. Sudden pain in abdomen, with passage of bloody mucus, and followed by complete cessation of alvine evacuations, and frequent vomiting.

Condition on the 4th day.—Face pinched and anxious, pulse small and rapid, tongue dry and red. Position dorsal, with legs flexed, and no disposition to move; abdomen decidedly prominent, tender and tense; tympanitic. Swelling general, and most prominent at the umbilicus, no dullness or other sign of tumor could be detected, nothing abnormal could be felt in rectum. Frequent vomiting of a brown fluid, having fecal odor.

Diagnosis.—Intestinal obstruction, probably intussusception of the ileo-cæcal variety, with resulting peritonitis.

Treatment.—Full doses of opium, careful and systematic efforts to relieve the difficulty with injections of warm water. These were unavailing, and the child died on the eighth day of exhaustion, without having had a passage from the bowels.

Points of Interest.—Frequency of intussusception as a cause of intestinal obstruction in young children, and in them the relative preponderance of the ileo-cæcal variety.

1. Value of opium to quiet peristalsis and facilitate reduction by injections.

2. The infrequency of a cure by spontaneous elimination of the invaginated gut in children, and at the most common site of the disease in the young, viz., ileo-cæcal variety, is shown by the statistics of Treves, and the unsatisfactory results of the various plans of reduction.

3. The importance of *early* laparotomy to seek for and relieve the difficulty after a fair trial has been given to injections.

In the discussion which followed the report of of these two cases, Dr. W. O'Hara said that the case of laryngeal diphtheria seemed to have been cured by tracheotomy, rather than by the bichloride. The chlorides have always been used in diphtheria: is it the chlorine in the bichloride that does the good? There hardly seems to be enough to destroy bacteria. It is hard to tell what the indications for tracheotomy really are. In a case of nasal diphtheria occurring after measles, several years ago, a consultant was called, who said the time had passed for the operation to do any good. There was great dyspnœa, also recession at the epigastrium, the positive symptoms laid down for the need of the operation, but he would not recommend an operation, as the proper time had passed; suggested the use of cold compresses to relieve the child, if possible, but said it would die within four hours. As soon as the first compress was applied the child gasped like a new-born child, regained its breath, and rhythmical respiration was kept up by ice-cloths, and the child finally recovered entirely.

It seems as though the local application of the bichloride ought to destroy the bacteria, if the experimental evidence of Drs. Wood and Formad, and their conclusions are, acceptable in reference to diphtheria.

Dr. Wm. W. Keen related a case in which he was called in consultation by Dr. Harlow, March 18, to a child æt. 6 years, who had been sick for two weeks. Diphtheritic membrane all over the uvula, fauces, and as far down the throat as was visible. The child had coughed up a large membranous cast, on which were ridges corresponding to the tracheal sinus. The patient was well-nourished, not markedly cyanotic, some congestion of the lungs posteriorly. Temperature, 100°; pulse, 120; respiration, 40. The urine was one-half albumen, and had been so for several days. The treatment had been calomel and soda, with later Basham's mixture. The child was placed under the chandelier on a table, chloroform administered, and the operation performed at midnight. The incision was made over the cricoid cartilage about two inches in length. The thyroid isthmus was found low down at the third tracheal ring. The upper ten rings of the trachea were incised, and a portion of them removed. The child improved for three days, temperature never exceeding 100⅘°. The outer tube was first removed and cleansed 36 hours after the operation. On the night of the 21st inst., respiration became very difficult, from inspissated mucus, so that the tubes had to be repeatedly removed and thoroughly cleansed; by the next day the mucus had almost disappeared. The tube was removed, and the child was able to breathe without it. At 6 p. m. of that day the tube was reinserted for three hours in order to keep the opening patulous, so that there would be no difficulty in the introduction of the tube should respiration become difficult during the night; but it had not been inserted since. The child is sitting up, the laryngeal wound being almost healed.

The temperature of the room was kept about 80°, and the atmosphere kept moist by lime-water spray in an atomizer; part of the time there were two. This method is preferable to that of keeping the air moist by slaking lime, for the slaking of lime scarcely supplies anything but vapor of water to the atmosphere. About f. ℥ iij. of brandy were given in 24 hours. Digitalis when the heart's action was weak, and Basham's mixture for the kidney lesion, which is steadily improving. The operation should be performed early; it is not one which in itself endangers life, and if laryngeal stenosis exist for a long time, the pulmonary complications make it futile.

In regard to the case of *Intestinal Obstruction*, the method of Hegar seems to be the best by which a copious injection may be given for overcoming the obstruction. An india-rubber tube 18 inches or 2 feet in length, one end terminating in an ordinary rectal nozzle, at the upper end a

glass funnel; by means of this, from 4 to 6 quarts of water may be injected slowly and painlessly in an adult. A fountain syringe may be used, having the bag hung about two feet above the patient. As a rule, no anæsthetic should be used, especially in children. The first indications of pain should be watched, otherwise too much water might be injected, and the peritoneal coat or the entire bowel ruptured. In the case reported, if Dr. Stone's rules could have been carried out, laparotomy would have been performed. Our experience with this operation would indicate that it involves very little additional danger, and there is the possibility of a cure. In one recent case, seen in consultation with Dr. D. M. Barr, in which the vomiting indicated obstruction, three quarts of water were injected while the patient was under the influence of an anæsthetic. The patient was so hyperæsthetic that anæsthesia had to be induced. The entire injection was retained, and the next day another, equally large, was given, which brought away a great amount of fecal matter.

Dr. O'Hara could not see that the first injection produced any effect, and thought it must have been absorbed.

Dr. Keen considered that the first copious injection probably moistened the fecal matter, as it was not scybalous when passed; and as the obstruction had existed for two weeks, it would have been so, unless so moistened. In some cases the course of an injection can be followed, if the large intestine can be mapped out, by the change in the percussion note.

Dr. O'Hara called attention to a case of fecal accumulation, which had been going on for some time, seen by him and Dr. Keen together, over ten years ago.

Dr. Keen remembered the case. The patient was a child six or seven years old. A rigid mass in the abdomen, which might have been mistaken for muscular contraction, only on account of its oblique direction. A large quantity of water was injected with a Davidson's syringe, and in a little while the child passed an immense quantity of fecal matter, and was relieved. The injections of water act by moistening the matter, and by causing peristaltic action of the bowels. The advantages of Hegar's method over Davidson's syringe are that no long tube need be inserted into the bowel; the flow is continuous, not spasmodic, and a greater quantity can be injected. The height of the column of water should not exceed two feet, as that exerts a pressure equalling one pound to each square inch of intestinal surface.

Dr. Montgomery said that almost a year ago he presented a report of twelve cases of tracheotomy to this Society, and at the January meeting of this year, presented a patient who had been operated upon and had recovered. A large number of the operations were for membranous croup. In the first ten cases the operation was a last resort, and all the patients died; one lived until the ninth day, and then died of cardiac paralysis. The shortest period of life was thirty-six hours after the operation. One patient lived seventy-two hours after being operated upon, and at autopsy the upper half of each lung was found collapsed; free secretion had been established, but the child was too feeble to throw it off, and might be said to be drowned in its own secretions. He now when called to a case in which the operation will most probably be necessary, speaks to the parents at once in regard to it, so that they may be prepared, and not lose valuable time when the case demands the operation. Out of four cases operated upon since the ten, three have recovered. Three of these four were diphtheritic croup; all were treated with the bi-chloride. Two of the cases were seen with Dr. Amy S. Barton; both were diphtheritic. The one first operated on recovered; the second was in the same family, and though there was great exhaustion, and the operation seemed to offer but little chance, it was done because the parents urged so strongly for it, as the other child had recovered. The child died fifteen hours after the operation. It is necessary to operate early, even though by so doing we may sometimes operate upon those who would recover without. As soon as remedies seem ineffectual to relieve the dyspnœa, operate. In diphtheritic croup the operation is demanded as soon as we have recession at the epigastrium. In using chloroform as an anæsthetic, there is less irritation and spasm of the larynx than when ether is used. Very little chloroform is needed, as the dyspnœa is generally great. First lifting up a fold of the skin transverse to the trachea, and transfixing it, the incision can be made through it and the superficial fascia without much hemorrhage. Then tear through the other parts until the trachea is reached. The incision should be made about the middle of the neck, the head being well thrown back.

Dr. Stone, in closing the discussion, said that the fact of some cases recovering without the operation of tracheotomy, should not make any difference as to the performance of the operation; which, to be successful, must be done *early*. The gaining of the consent of the parents is often due to the manner in which the doctor puts the question to them; if he only half believes in the operation, it is hardly likely that he can gain the consent of the parents.

Dr. Keen's criticism in regard to the performance of laparotomy, in the case of intestinal obstruction, is just. The operation should have been performed, but the circumstances of the case were such that surgical interference was out of the question. Treves recommends anæsthesia in children, previous to the trial of injections, to overcome the tenesmic efforts of the patient to pass off the fluid. Not using force, as a rule, is good, but will the simple force of gravity be enough to do any good? Treves recommends a nozzle with a pad attached, so as to prevent return of the fluid.

MARY WILLITS, M. D.,
5107 *Germantown ave.* Reporting Secretary.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

(*Concluded from page* 529.)

The president presented the specimen and read the following report of a rapidly growing

Papillomatous Ovarian Cyst.

Mrs. G., æt. 41, widow for eight years; has had eight children, the youngest being nine years. She always enjoyed robust health until Sep. 1884, three months before I first saw her. At that time a slight metrorrhagia began without pain or

other disturbance. Previous to that time her catamenial periods had been regular. In October she noticed that the lower portion of her abdomen was slightly enlarged a little to the left of the median line. She thought nothing of it then, but thought that she was growing fat. The hypogastrium however continued to distend, and she began to lose flesh. Her physician, Dr. A. R. Blair, of York, Pa., brought her to see me on Jan. 3d, 1885. Her abdomen was then as large as at the sixth month of gestation, symmetrically developed, perfectly smooth, dull on percussion over the distended portion, but resonant in flanks and epigastrium, and there was marked fluctuation. Dark bloody discharge from uterus, not fetid. It was thought she was pregnant, and that the metrorrhagia was due to threatened miscarriage. But she was losing flesh, and there were no rational or physical signs of pregnancy except abdominal enlargement. The uterus was slightly prolapsed and retroverted, rather softer than natural, as patulous; cervix granular. Sound two and a half inches; uterus not easily moved because of a mass pressing upon it from above. I diagnosticated a rapidly-growing ovarian cyst, and advised immediate operation; but she was not ready. I saw her again on February 7th. The tumor had increased to double the size it was at first examination. It was still symmetrical, and occupied the same relation to the uterus. She was losing flesh and strength. She now complained of pain all over anterior surface of abdomen, and her pulse and temperature were slightly elevated. She at no time suffered pain in the tumor.

On February 18th, she entered my private hospital. Has increased greatly in size during the intervening ten days. Circumference at umbilicus forty-six inches, veins in abdominal wall distended. Tumor still symmetrical and markedly fluctuating. Metrorrhagia has continued daily since its first appearance in September. Suffers from dyspnea. Pain over surface as before, and abdominal wall seems to be one with the tumor. I suspected from this circumstance adhesions of tumor to peritoneum. Urine normal.

Operation, February 20, 11 a. m., assisted by Drs. D. J. M. Miller and J. C. Gabell, in the presence of Drs. A. R. Blair, J. W. Kerr, and F. B. Hazel. Incision three inches; tumor almost universally adherent to anterior wall of abdomen and omentum, and very vascular. I passed my hand and separated adhesions, and then tapped the cyst; the fluid had the color and consistence of healthy pus, and was more than an ordinary wooden pailful in quantity. Solid portion of tumor larger than the fœtal head at term, was delivered through the small incision. The tumor proved to be of the left ovary, and had a very short and vascular pedicle, which held it in close contact with the uterus. Ligated and amputated omentum. Transfixed and ligated the pedicle with fine Chinese silk, cut and dropped. The right ovary being perfectly healthy, was not removed. The uterus was soft and congested. Peritoneum purple from congestion, but there had been no ascitic fluid, and the peritoneal cavity was found almost free from liquid. Probably ten minutes were spent in looking for bleeding vessels, and finishing the "toilette of the peritoneum." Abdominal wound then closed with eight silk sutures. The patient recovered from the anæsthetic without any evidence of shock; pulse 98, temperature normal; and she continued to do well until the second day, in the evening of which the temperature reached 100°, its highest point; pulse 108 and strong. She complained of being tired, and looked worn. She had not passed flatus from the anus, but there were occasional eructations of foul gas. There was no tympany and no pain, but at about 11 p. m. she vomited, or rather regurgitated, about a pint of very fœtid yellowish liquid, of a decidedly fœcal odor. The large quantity (she had not taken a teaspoonful of anything since the operation) and the odor, together with the fact that she had not passed flatus from the anus, caused me to suspect intestinal obstruction. Her temperature fell soon after this to 96°, and her pulse rose to 130, and became very weak. There was no pallor of countenance or distension of abdomen or Douglas's cul-de-sac, or should have thought this depression, bordering on collapse, was due to hemorrhage. Neither were there any other symptoms of intestinal obstruction than the apparent fœcal vomiting and the non-escape of flatus from the rectum.

Under the influence of active stimulus, by the rectum and hypodermically, she slowly rallied, but the temperature did not reach the normal point until the fifth day after the operation, when flatus began to escape from the rectum. Her recovery was rapid after this. The sutures were removed on the eighth day. Union complete and solid. She sat up on the thirteenth day. There has not been any bloody discharge from the uterus since the operation.

The tissues of the cyst-wall are very friable, and the internal surface is studded with an exuberant papillary growth, presenting an appearance not unlike cauliflower excescence.

The very rapid growth of this tumor to the great size which it attained in five months, the constant metrorrhagia and the character of the tumor, place this case quite out of the usual course of development of ovarian cysts, and make it worthy of record. These are characteristics of malignant disease. Is this a malignant tumor? I think not, in the sense of that it will necessarily return, now that it has been removed before the cyst-wall had broken down and discharged its contents into the peritoneal cavity. This is the course of papillomatous ovarian cysts. But even when this has occurred, and the peritoneum become involved, the disease may not return after removal. Some years ago I assisted Dr. Goodell in the removal of a papillary growth of the ovary, in which the cyst had ruptured and discharged its contents into the peritoneal cavity. The peritoneum was greatly involved, being thickly studded at various points with hard papillary nodules. The patient recovered, and the disease has not returned. Dr. Emmet records a like experience. He says, "I have never regarded the condition as malignant in character, or in any respect more than a benign growth, accidental to ovarian tumors, and accompanied by an ascitic accumulation." (Ascites complicates a later stage of the disease than my case had reached.) "I have, however, sometimes observed in this supposed malignant disease that patients bore the

shock of the operation badly, and died from apparently trivial causes." *Prin. and Prac. Gyne.*, 3d ed., p. 683. It is probable that ovarian cysts of very rapid development often have this papillary character. One of the specimens which I presented to this society at its last meeting was of this description, though less marked; and it had attained a size of thirty pounds in nine months. It is also probable that the constitution is more profoundly affected by these growths than by the ordinary slow-growing ovarian cysts. For these reasons operations should never be deferred in such tumors.

Dr. Harris inquired whether any microscopic examination of the tumor had been made? He always suspected malignancy in rapid growths, and in papillomatous tumors the decision can not be made from appearances, as of two such having the same apparent characters, one may prove to be malignant and the other benign.

Dr. Goodell remarked that the question of malignancy in ovarian tumors was a most interesting one. As regards papillomatous cysts; Doran had divided them into two classes, one springing from the pilus of the ovary and not necessarily malignant, while papillary growths in cysts of the broad ligament usually indicated malignancy. Some years ago he removed a collapsed papillomatous ovarian cyst upon which the late Dr. Hodge had refused to operate in consequence of supposed malignancy. It was complicated by ascites, and the peritoneal cavity had become infected with secondary growths; yet the woman got well, and has probably remained well. On the other hand, benign-looking growths were sometimes malignant; for instance, he removed a large tumor having many adhesions; twenty-four ligatures were left in the abdominal cavity. It was wholly benign in appearance, and the patient got up and about, but soon she became oppressed by rapid breathing. Effusion into the right pleura was discovered, together with malignant growths affecting that cavity and scattered throughout the abdominal cavity. The tumor was evidently malignant, but it did not look so. In another case of apparently benign cyst, in which the clamp was used, menstruation occurred from the cicatrix, and, later, papilloma of the stump and abdomen sprouted out from the cicatrix, and the patient died. He said that all his cases of colloid tumors, three in number, have become malignant afterwards. In one case, five years after the first operation, the second ovary became diseased, the sac burst, and the whole contents of the peritoneal cavity became infected. In another, two years after the removal of both ovaries, the disease returned in the broad ligament, probably from the stump of the ovary. In another case, the cicatrix burst open a few weeks after the operation, and a large papillomatous growth sprouted out, the lady dying soon after. Tait considered that among the causes of malignancy are tapping and delay in operating; the age of the cyst tending to malignancy. Dr. G. doubts if the microscope can distinguish between benign and malignant papillomata. Virchow states that although benign at the beginning, they may become malignant in the later stages.

EDITORIAL DEPARTMENT.

PERISCOPE.

Coca in Fatigue.

Dr. E. R. Palmer, of Louisville, thus writes in the *American Practitioner*, February, 1885:

On Monday, November 10th last, at 1:22 a. m., a seven-day "go-as-you-please" walking match was inaugurated at the Tivoli Theatre in this city. The contestants were six professional female pedestrians, who, together with a management, trainers, etc., constituted an organization that had been conducting like contests in several of the Western cities for some months past. Prompted in the main by curiosity, I dropped in on the scene at about one o'clock p. m., Saturday, the sixth day of the contest. I learned on inquiry that two, and probably three, of the contestants had dropped out of the race, but that the management, with a view to "keeping up the attraction," was negotiating with two of these three, one a celebrated runner, the other a favorite because of her youth, with a view to their reentering the lists. The three remaining contestants were then on the track. At 1:15 a fourth made her appearance. I was told that it was the young one, L. C. She walked slowly, and with evident pain and weariness, around the track, which measured twenty-one laps to the mile. In conversation with her trainer I learned that she had come back under the inducement of a written contract pledging her the sum of one hundred dollars extra if she accomplished the required distance of three hundred and fifty miles by the close of the seventh day. It was evident that she was badly "out of form." Her gait was unsteady, and her eyes, sunken in her head, were encircled by broad dark rings. The register showed for her two hundred and forty-seven miles and nine laps so far accomplished, leaving to be covered in thirty-six hours one hundred and two miles twelve laps to save her distance. The register also showed her to be sixty-eight miles behind the next competitor in the race.

While acquiring this information, I happened to remember that Flexner & Co., druggists of this city, had, a few days before, informed me that they were in possession of a large lot of Fraser's wine of coca, sent them for distribution among the profession here for experimental purposes, and I at once proposed to the trainer that he permit me to take part in her control from then till the finish, assuring him that I believed I might restore her vigor, put her on her feet, as it were, and possibly make her win her race by means of a medicine which I would furnish free of cost, and would warrant to do her no harm. After a short consultation with her he accepted my proposition,

and I sent a boy for a pint of the coca. She drank a large sherry-glassful at once, with the remark that it tasted "elegant," and continued her journey. In twenty minutes I allowed her the second dose, and by thirty minutes after the first dose, two o'clock, her step was quick and elastic, and with head up, she moved easily around the track, humming the air the band was playing, and declaring that she felt like a new woman. At 3:15, two hours from the new start, she had accomplished nine miles, making a total of two hundred and fifty-six miles and nine laps, at a rate of four and one-half miles an hour. The following table shows the rest:

4:45—266.1 miles ;
9:10—285 "
10:13—290 "
11:30—295 "

As will be observed, the time for each five miles runs a little over an hour. She has in the meantime gained twenty-one miles over her next competitor, reducing the gap to forty-seven miles. So far one pint of the coca wine has been consumed. At 11:30 she retired, and slept soundly until 2 a. m., when she returned and walked three miles, retiring again on account of the track being full of amateur contestants. This time she slept until a little before 9 a. m ; awoke thoroughly refreshed, ate her breakfast with good appetite, and was on the track at 9 a. m. with two hundred and ninety-eight miles ; 10:05 with three hundred and three miles ; 11:30 with three hundred and eight miles, three laps, when she retired to rest and lunch, returning at 12.35. In the meantime the complaint reached me that some one had stolen her bottle of medicine; another was ordered at once on a *carte blanche* to the druggist to supply all that was called for.

The race between the leaders was practically settled by this time, and all interest centered about the question as to whether the girl would, by drinking the coca, be able to make her distance. It was a notable fact, that of all the walkers she was now the freshest, and her time, barring the spurts of the runner, who had returned, the best time being made. From 12:35 p. m. until 5:35 p. m., she kept constantly traveling around the ellipse, until the dial showed three hundred and twenty-nine miles to her credit, leaving but twenty-one miles to be made in nearly eight hours. She left the track at this point for supper, returning at 7:09 p. m., looking to be in splendid form, and proving it by walking five miles in one hour and three minutes. At 9 o'clock two male professionals were to start in a five-mile contest, and at 8:52 she left the track with three hundred and thirty-seven miles, two laps to her credit. During all of this time she had taken the coca freely, under directions to give it to her whenever she called for it. I did this because of its not in the least disagreeing with her stomach, and because of the manifest bracing power it was exerting upon her muscular system. At 9:14 she returned and essayed to resume her journey, notwithstanding the two male pedestrians were rushing around the track and passing her every few laps. It soon became evident that she was constantly in fear of being run down by them, and on her refusing to leave the track, she was urged to keep the pole as they passed. During the three hundred and thirty-ninth mile, on turning the northeast angle of the track, at an unguarded point she lost her presence of mind, faltered, and in attempting to step backward out of the way of one of the men, fell a distance of nearly six feet to the ground, and was carried to her dressing-room unconscious, but with no apparent injuries. She rallied shortly, drank some coca, and, although complaining of pain in the epigastric region and in the right knee, she insisted on again taking the track, where, after limping through two laps, she gave way to tears and left the track, remaining in her room until 10:30, when she came out again to strive for her coveted goal. By dint of the free use of coca and the encouragement given by the audience, she kept slowly but steadily at work until twelve and a half minutes before midnight, when she entered her last five miles, finishing the three hundred and fiftieth mile at seven and a half minutes past one o'clock, with but fourteen and a half minutes to spare, with a painful side and a swollen knee adding increased burden to her task during its most critical period.

She was taken shortly after to her hotel, where I found her next morning resting comfortably, but with the right knee and leg swollen and quite painful. In a few days she was fully restored. Immediately after her fall she had a full slow pulse of seventy. The following day, still using the coca, the pulse was regular and full, showing the same rate. On the third day, the coca having been withdrawn, there was a slight increase, with some irregularity, which, however, shortly disappeared. During these days I learned the following facts regarding her career as an athlete: She puts her age at seventeen years, is five feet five inches tall, and weighs one hundred and twenty pounds, with the strong hard muscles and absence of intermuscular adipose tissue characteristic of a person in training. She entered pedestrianism in July last, and had participated in some eight contests. The last of these occurred in Cincinnati but two weeks previous, during which match she walked four hundred and two miles in seven days. With short rest, poor lodgings, bad food and travel, she was by no means in form for the present contest, and so when she found her muscular powers flagging, she had recourse to sherry flip, and even stronger liquor, the result being her letting down as stated at the commencement of this article. From the time she began with the coca she took no other stimulant except a sip at long intervals of sherry and milk, and ate scarcely anything, owing chiefly to the poor quality of food furnished. To my mind the experiment was both striking and conclusive, in every way favorable to the vaunted efficacy of the coca wine in physical fatigue.

It will be remembered that several years ago, when coca, was first introduced, I reported the cure of several cases of opium habit by its free administration. The then objection to its use was its nauseous taste, as prepared in fluid extract, patients in a short time invariably refusing to take more of it. This fault is fully overcome by the elegant and agreeable wine. The wine of the United States Pharmacopœia, as made by the dispensing chemist, is inelegant and possessed of

all of the nauseant properties of the fluid extract from which it is prepared. So far, I have found three superior wines made directly from fresh leaves—Fraser's (the one I used), Henry Thayer's, and Caswell & Massey's.

Probably no drug more readily loses its virtues than the coca leaf, so that great care must be exercised in its selection, many of the specimens for sale in the Eastern markets being absolutely inert. The great advantage of a good wine made of selected leaves being the readiness with which a delicate stomach will bear it in full doses and for a long period of time. I feel confident that there is thus placed in the hands of the practitioner an elegant, safe, and sure remedy for physical exhaustion. I find coca *the* agent used in the City Hospital in *mania-a-potu*. The new anæsthetic, muriate of cocaine, is derived, as is known, as an alkaloid from the leaves.

Ilio-Femoral Aneurism, Treated by Instrumental Compression—Cure.

Dr. W. Berry thus writes in the *Lancet*, March 14, 1885:

The notes of the following case of ilio-femoral aneurism are interesting, especially as they prove the dictum of Mr. Bryant in his work on Surgery, page 463, second edition, where, in writing of ligature of the external iliac artery, he says: "This operation may be required for aneurism of the common femoral, for wound, or for any other cause in which it is necessary to arrest the flow of blood through the lower extremity. It should not, however, be performed for any disease unless pressure of the artery, digital or instrumental, has proved ineffectual or is inapplicable; for Mapother,* Eck,† and Hilton,‡ have all recorded instances of cure of inguinal aneurism by these means." This case was sent to me by my friend, Dr. Hannah, of Ashton-in-Makerfield, and my first intention was to ligature the external iliac, this operation to my mind affording the only chance of cure. At a consultation with my colleagues of the infirmary staff, it was thought advisable to try pressure in the first instance, and if failure followed, then to ligature the vessel above the aneurism. The application of compression was not easy to accomplish, and much credit is due to the indefatigable perseverance and ingenuity of our senior house-surgeon, Dr. Jackson, and also to the courage exhibited by the patient himself, which led to a successful result as a reward for their efforts. I am indebted to Dr. Jackson for the following notes:

George S——, aged forty years, a collier, was admitted into the Royal Albert Edward Infirmary on August 21, 1884. He then stated that whilst following his employment seven weeks previously he had been injured in the right thigh by a runaway coal-tub. Immediately after the injury he felt a shooting pain in the region of the right groin, which lasted about fifteen minutes. There was no external wound or abrasion of the skin, but poultices were applied on account of the pain. Patient continued to work, and about two days afterwards noticed a small lump in the right groin, which had continued to enlarge. He continued to work until a week after the accident, when he was idle for three weeks, in consequence of a lock-out at the colliery; after this he worked one week, and then "strained" himself again, and was laid up. The patient has been married sixteen years, and has three healthy children; he lost one, aged fourteen months, from consumption of the bowels. There is no history of syphilis, but there is a circular scar about the middle of the dorsum of the penis, which he states was caused by a wound he received in the mine. He had gonorrhœa twenty years ago. On examination, a pulsating tumor, the size of a large walnut, was found immediately below the right Poupart's ligament, at a point corresponding with the position of the femoral artery. The patient was placed on milk diet, and ten grains of iodide of potassium, three times a day, were ordered. On September 2, he went home, against the wish of the house-surgeon, without any improvement having taken place. On October 1, he was readmitted. The tumor could now be felt pulsating above Poupart's ligament and as far down as a point two inches below it, and was one inch in width. The patient was again put on milk diet and fifteen-grain doses of iodide of potassium three times a day; and after a consultation with the staff, it was decided to apply pressure to the external iliac artery. On the 9th, the patient was placed in a small ward alone, and at 2 p. m. had three-quarters of a grain of morphia hypodermically, and the right leg enveloped in a fold of cotton wadding. Pressure was then applied to the external iliac by means of a Lister's tourniquet until the pulsation in the tumor ceased. In about half an hour the patient became very restless and complained of pain, and all circulation in the limb appeared to have ceased. He was then allowed to smoke, and, having been deprived of this (a favorite enjoyment of his) for over a week, submitted cheerfully to the pain for another hour. At 3:30 p. m., the pain was so severe that chloroform had to be administered, and this was continued until 6:15 p. m., making in all four hours and a quarter of continuous pressure, when the tourniquet was removed. On the 10th, the pulsation in the tumor was slightly (?) diminished, the patient feeling comfortable. On the following day the patient was in much the same condition. The bowels were relieved by a dose of castor oil. On the 12th, the pulsation in the tumor was apparently as strong as ever; the leg was flexed on the thigh and the thigh on the abdomen with a roller-bandage in the groin, for one hour and a half both morning and evening. Next day the leg was again flexed, as before, for two hours and a half. No result followed this procedure. On the 14th, the pulsation was as strong as at the commencement of treatment, pressure was again applied by Lister's tourniquet, with the aid of tobacco and chloroform, for three hours and a half. Pulsation in the tumor had entirely ceased when the pressure was removed. The following day the pulsation had ceased; the limb was cold, but the patient was comfortable. On the 16th, the circulation in the limb returned. On the day following, there was no pulsation in the tumor, which was quite solid. The circulation in the limb was quite re-established through

*Dublin Medical Press, 1865.

†St. Bartholomew's Hospital Reports, 1866.

‡Medical and Chirurgical Transactions, 1869.

collateral channels. The patient went on well, and was discharged cured on November 3, 1884. At this time, a firm tumor could be felt an inch and a half in length and an inch in width at the seat of the aneurism, but no pulsation, and the circulation in the limb perfectly good.

January 27, 1885. Patient seen and examined to-day. Tumor now feels like a thickened cord about three-quarters of an inch thick; no pulsation in it. Circulation in limb keeps good, but he is advised to nurse his leg yet awhile.

Remarks.—This case, though unfavorable for direct pressure owing to the circumstance of its position, yet by the result amply repays one for the trial made. I must here tender my thanks to Dr. Jackson for his patience and perseverence in the treatment of this case, for had he not sat by the patient and kept the tourniquet fairly in position over the artery, I am sure we should not have been able to record this successful issue.

Post-Partum Drainage of the Uterus: Washing the New-born Child. A Hint as to Hypodermic Injections.

Dr. S. J. Bumstead thus writes in the *Peoria Med. Mo.*, March, 1885:

POST-PARTUM DRAINAGE OF THE UTERUS.

It occurred to me a year or so ago that the lying-in patient was particularly liable to septic trouble by reason of the position usually occupied in bed, making anything like thorough drainage nearly impossible. At the same time, probably most of us have been averse to the patient arising even to urinate, preferring them to use the bed-pan, and under these circumstances how easy it is for some of the discharges being thrown off the uterine walls to remain inside the uterine cavity. Of course the fundus of the uterus does not immediately sink below the sacral rim, yet when the patient is lying horizontal, the incline from the interior of the uterus to vagina is not great, and I fear too often nearer the dead level than is consistent with running streams. With this in view, whether fully justified or not, I have been in the habit of late of ordering the head of the bed blocked up from six to eight inches, or just avoiding what might be uncomfortable to the patient, and maintaining this position as long as she keeps her bed, and there is any considerable lochial discharge. It is well also to permit these patients to be placed on the chamber once a day, to still further promote the escape of the offensive material from the uterine cavity.

WASHING THE NEW-BORN CHILD.

We are also too apt to forget that the infant just brought into the world, was but a moment before enjoying the equatorial climate of 98½° F., or 38° C., and that the one with which it is ushered is oftener 65° F. than else. Under these circumstances a sudden change of 33½° of temperature takes place in its surrounding medium, and could these poor "little men and women" reason at this time, they would undoubtedly agree with the sentiment that "this is a cold, cold world." What should a consideration of such plain facts teach us? Plainly it seems to me that we should wrap up the child very warm, and allow it to remain unexposed to the free atmosphere of the room until several hours have elapsed, in order to give its organism time to adapt itself to the extreme change in its environment, and thereby avoid many troubles which arise in consequence of this terrible first ordeal, through which the new being has to pass. I incline to the opinion that any other plan is almost cruel, and possibly one which might well be taken in hand by the humane societies, when they lack objects upon which to exercise their humane faculties.

A HINT AS TO HYPODERMIC INJECTIONS.

Hypodermic injections of various kinds seem in many cases a necessity, and without entering into the question as to the abuse of this method of medication, I would say that as little pain as possible should be given in this or in any other minor surgical procedure. I have noticed that most physicians seem to think it necessary to make the injection in the vicinity of the diseased or painful part, but with the exception of neuralgia of a superficial nerve trunk, I believe there is no good reason for, or rather, necessity for so doing. Taking into practical account the varying degrees of sensibility to pain of the different regions of the body, I have for several years always taken the back or the front of the shoulders towards the spine, rather than outwards towards the shoulder-joint, as the least sensible to painful impressions of the surface of the body. If you will pinch the skin here a moment before piercing it with the needle, you will often be told it was not felt in the least as pain. Try it on patients whom you have heretofore tortured on the arms and anterior surface of the body, and I believe they will testify in favor of this method.

Membranous Croup; Diphtheritic Croup; True Croup.

The April number of *The American Journal of the Medical Sciences* contains an elaborate clinical study of true croup from the pen of Dr. J. Lewis Smith, of New York. He fully considers the etiology, anatomical characters, diagnosis, prognosis, and treatment. Whatever the cause; the anatomical characters, the clinical history, and the required treatment, are so nearly identical that attempts to differentiate the disease when produced by other agencies than diphtheria from that due to diphtheria, have proved futile and unsatisfactory in localities where diphtheria occurs, except in a few instances, as, for example, when croup has been manifestly caused by swallowing or inhaling some irritating agent.

Dr. Smith holds that inflammation of the laryngeal and tracheal surface, whatever its cause, whenever it reaches a certain grade of severity, may be attended by the exudation of fibrin and the formation of a pseudo-membrane; but such a result more frequently occurs in the inflammation caused by diphtheria than in that produced by other agencies. In diphtheria a moderate laryngo-tracheitis is attended by the pseudo-membranous formation. Dr. Smith's experience leads him to believe that not more than one in eight cases of croup has recovered by medicinal treatment which began in the first week of diphtheria, and in which the symptoms were so pronounced as to indicate more or less laryngeal stenosis. The exudation in the first week of diphtheria, or in its active period, occurs so rapidly, and in such

large quantity, that no one of the medicinal agents or modes of treatment, which physicians commonly prescribe, is sufficiently prompt in its action to prevent the formation of the pseudo-membrane to an extent that soon endangers life.

Croup occurring in the second or third week of diphtheria, since it is attended by less abundant and less rapid exudation than when it occurs during the acute stage, can be more successfully treated under the persevering use of solvent inhalations, and a larger proportion than one in eight, perhaps one in three, recovers by the early and continuous or almost continuous use of inhalations.

Still the mortality is so large, and the suffering so great in croup, at whatever stage of diphtheria it occurs, that we cannot rely on the slow action of medicines or inhalations, and surgical treatment is in most instances required to diminish the suffering, and afford the best chances for sav-ing life.

Under the head of medicinal treatment, he strongly recommends trypsine as a solvent of false membrane. Of calomel, he says: The experience of many physicians justifies the belief that mercury and especially calomel employed within certain limits in the commencement of a pseudo-membranous inflammation does exert some controlling action on this disease. That it did much harm formerly when physicians prescribed it as freely as we now employ patassium chlorate, to the extent in many instances of increasing the cachexia and causing mercurialism, should not deter us from its judicious use. In the ordinary form of diphtheria he would not advise the use of calomel, or would limit its employment to one or two doses of six to ten grains in the commencement of the disease in robust cases. But in croup, since the danger is not from the cachexia or blood-poisoning so much as from the laryngeal stenosis, which is apt to develop rapidly, that medicine is indicated, and should be prescribed, which most strongly retards the exudative process, and aids in liquefying and removing the pseudo-membrane, provided that it produce no deleterious effect which renders its use inadmissible. Hence it is proper to prescribe calomel in larger doses and for a longer time in the treatment of croup, than in other forms of membranous inflammation, if it fulfill the indication, as it seems to in a measure In his own practice, however, calomel is not prescribed after the first or second day, since Dr. Smith prefers the use of other remedial measures, which are efficient, and are less likely to produce injurious effects. The subject of surgical treatment is also fully discussed, and Dr. Smith holds that we can claim for tracheotomy judiciously performed, and at a sufficiently early stage, the cure of one in every three patients on the average.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——"The Puget Sound Sanitarian and Prohibitionist," vol. i. No. 1, comes to us from the far Pacific shores, declaring with no uncertain note in favor of "Total abstinence for the individual; total prohibition for the state." It is a monthly published by the Woman's Christian Temperance Union, of Seattle, Washington Terr., at $1.00 a year. It is energetic, positive and well-edited, and we doubt not will do a good work.

BOOK NOTICES.

The Diaphragm and its Functions: Considered Specially in its Relations to Respiration and the Production of Voice. By J. M. W. Kitchen, M. D. Edgar S. Werner, publisher, Albany, N. Y. Flexible cloth, $1 *net*, postpaid.

The functions of the diaphragmatic muscles to healthful breathing, to the management of the voice, and to the general health, are brought forward with considerable force in this essay.

The anatomical division of the subject treats of the diaphragm's location, general shape, gross composite parts, origin, openings, tendon and muscular fibres, minute anatomy, blood-supply, lymphatic and nervous supply, relations, embryology and history of development, comparative anatomy and important co-operative structures. The physiological part discusses the function of respiration generally, the movements and varieties of respiration, the action of the respiratory muscles, respiratory action and change of shape and respiratory rhythm of the diaphragm, control of the diaphragm's action, incidental functions of the diaphragm, change of shape in the trunk during respiration, differences in male and female breathing, certain natural phenomena that occur synchronously with the action of the diaphragm, relation of the circulation of the blood to the action of the diaphragm, actions of the diaphragm resulting from extraordinary causes, the comparative physiology of the diaphragm, and functional development of the organ.

Much useful hygienic advice is added of especial value to females.

The Medical Directory of Philadelphia, Pennsylvania, Delaware, and the Southern Half of New Jersey, for 1885. 8vo., flexible cover, gilt, pp. 397. Price, $2.50. Philadelphia: P. Blakiston, Son & Co., 1885.

This valuable compilation will be prized by all who would familiarize themselves with the present condition of the profession, and of medical organizations and institutions in the territory named. It has not only a list of practitioners, druggists, and dentists, but contains also a full and accurate description of medical associations, societies, hospitals, homes, schools, asylums, nurses, and nurses' schools, etc., and a variety of miscellaneous information.

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DISCOLORATION OF DEAD BODIES.

After dead bodies have been exposed for a certain length of time to the influence of the atmosphere, peculiar, green discoloration is apt to set in in the skin, the muscles, and all organs provided with blood. A greenish tint is also noticed at times in bloodless-tissues. On flesh of animals this discoloration is by no means a rare occurrence, and is frequently observed before the odor of decomposition announces the decay of the substance. On the day of the funeral the relations of the deceased usually like to see the dead person appear as naturally as possible, and the undertaker is often at a loss how to remove the discoloration that has already taken place.

For this purpose the investigations of P. Pellacani are of interest. P. took the greatest pains to determine the causes of this green tint, and to discover the means of removing the discoloration. His researches have been reported in the *Rivista Sperim. de Fren.*, etc., x. 3, pp. 93–121, and we bring in the following, results of his laborious work.

The green color met with in tissues supplied with blood-vessels, P. found to be due to a body, the result of a chemical union of the sulphuretted hydrogen derived from the albumen with the coloring matter of the blood. That he is correct in this supposition he has proven by the chemical identity of this body with the so-called sulpho-hæmaglobin artificially prepared in the laboratory. The green tint produced in some organs and tissues not provided with blood-vessels, is due to a combination of the sulphuretted hydrogen with a globulin—sulpho-vitellin. Both substances, the sulpho-hæmaglobin as well as the sulpho-vitellin, can be easily deprived of their green color by any solution containing a sufficient amount of chlorine. It is also well to know for practical purposes, that if not employed in too large a quantity, the chlorine solution causes no other change in the appearance of the tissues, except that of slightly bleaching them.

POISONED BY COLORED STOCKINGS.

Again and again have medical journals warned

against the wearing of cheap colored underwear. As these materials generally consist of cotton, at least to a great extent, the coloring stuff is not always an innocuous, but frequently a dangerous one.

The latest case of this kind is reported by Dr. O. Seifert in the *Wiener Med. Wochenschrift*, 1885, 38. A young lady, æt. 26, had been wearing stockings, which had been colored by an anilin-red containing a large percentage of arsenic. She was suddenly seized with all the symptoms of a gastro-enteritis and an acute hæmorrhagic nephritis; besides, an eczematous skin-eruption made its appearance on the dorsal surfaces of both feet. The treatment first gave a very unsatisfactory result, until the cause was discovered, when the patient was cured of her disease within three weeks. The urine, however, for a considerable time afterwards, contained a small amount of albumen, though this finally also disappeared.

There ought to be a sanitary inspector, not only for all food—whether solid or fluid—that is offered for sale, but also for articles of wear. The demand for cheaper goods and the great competition has made many manufacturers reckless, and they seem to care very little if they injure the health of individuals, if they can only produce goods which are cheap and showy. As not every buyer can be an expert, purchasers ought to be protected by law, making the poisonous or any adulterations of any article offered for sale, a criminal offense, and appointing inspectors for the purpose of investigating and discovering all dangerous swindles of that kind. Meanwhile, it would be best for all buyers to avoid all cheap articles, which mainly attract attention by their bright colors. In wool, the danger is not so great, as woolen materials may be easily dyed by innocuous vegetable coloring matters.

Notes and Comments.

Tannic Acid Injections in Cholera.

In view of the fact that a visitation of cholera is expected by many this summer, it is well that we should refresh our memories on all recommended methods of treatment. Hence we reproduce the following from the *Lancet*, February 21, 1885:

During the recent exceptionally severe epidemic of cholera at Naples, Professor Cantani proposed combatting the premonitory diarrhœa by warm tannic acid enemata. The practice was largely and successfully adopted. Dr. Vincenzo Vitone has just published, in *Il Morgagni* for last month, his results with that method of treatment at the Cholera Orphanage at S. Antonio a Tarsia. The children admitted in this institution came from the most infected parts of the city, and had lost one or both parents from cholera. Three illustrative cases may be quoted from a large number in which cholera was promptly arrested by tannic acid clysters. S. B., aged eight, was conveyed to the orphanage on September 18, from the house in which both his parents had died from cholera. He had enjoyed perfect health up to the time when, from no appreciable cause, he was seized with vomiting and diarrhœa. In a few hours he had ten evacuations, the last perfectly colorless. The patient complained of intense thirst and pain over the region of the stomach; the face was slightly cyanotic; temperature 36° C.; pulse scarcely perceptible. The following solution was injected per rectum: Warm water, 1000 grammes (1 gramme is equal to 15.432 grains); tannic acid, 3 grammes; gum arabic, 20 grammes; and laudanum 12 drops. An infusion of chamomile was at the same time administered. After the lapse of an hour the boy was more wakeful, and the pulse became perceptible; the alvine discharges ceased, and in two days the patient left his bed completely cured. P. T., aged four years, had lost her mother from cholera, and was conveyed to the Orphanage on October 10. She was rapidly reduced by rice-colored stools, so as to be scarcely recognizable. At 3 p. m. the temperature was 36.1° C., and the pulse almost imperceptible. The following clyster was administered: Warm water, 400 grammes; tannic acid, 2 grammes; gum arabic, 15 grammes; laudanum, 5 drops. The diarrhœa was suddenly arrested. At midnight the child was wakeful, hungry, and partook of milk. In two days she left her bed perfectly cured. A. R., aged three, lost his mother from cholera, and was suddenly seized with vomiting and diarrhœa. The face became cyanotic, and the extremities cold. The temperature of the body was 35.1° C.; the pulse was scarcely perceptible. A warm tannic acid clyster, according to the formula in the preceding case, was administered at once, an infusion of chamo-

mile was given by the mouth, and the limbs were wrapped in warm woolen cloths. In the course of two hours the diarrhœa had ceased, and marked reaction set in; the temperature was 38.8° C., and the pulse 80. The following day the fever continued, and the bowels acted, but the motion was well formed. The fever continued two days longer, but then subsided, leaving the child perfectly well. In adults, Dr. E. Villani has injected per rectum as much as fifteen grammes of tannic acid in two litres of warm water, with invariably good result. The *modus operandi* of the treatment s attributed by Professor Cantani to the astringent power of tannic acid, and to its sterilizing the comma bacilli, which need an alkaline solution for their development. Without entering into this therapeutical disquisition, the clinical results appear to afford striking evidence of the efficacy of warm tannic acid clysters in the treatment of cholera.

Arcus Senilis in a Boy Aged Three and a Half Years.

Such cases as the above are so very unusual, that the following, which Dr. H. F. Hansell reports in the *Med. News*, April 4, 1885, is worthy of consideration. It is the case of a mulatto boy three and a half years of age, with distinctly marked and unmistakable arcus senilis in each cornea. "Circulus" senilis would be the more accurate designation, since the ring is complete on each cornea, though not quite so fully developed below as above, and on the sides. It appeared on each eye simultaneously in the upper segments of the cornea, about one year ago, while the boy was convalescing from an attack of measles, and slowly advanced until the arc was made into a ring. He could obtain no history of inflammation or ulceration, and the mother positively asserts that the child's eyes "never had anything the matter with them, except the white rings."

These rings of fatty degeneration are in nowise dissimilar to the arcus senilis of adult life or old age. There is a margin of clear cornea between them and the sclerotic border, and they are sharply bounded toward the centre by clear corneal tissue, which shows no trace of previous inflammation.

The influence of heredity, which can usually be traced where the arcus appears in the very young, in our case is negative. The mother and several brothers and sisters are free from the affection. The boy has no other abnormalities, and his health is perfect.

Edwin Canton, in his monograph on arcus senilis, says: "The arcus is said to have been seen at birth. I doubt the correctness of this assertion, and, as I have already remarked, believe that an arciform opacity, the result of ulceration, was mistaken for it." The youngest case he mentions occurred in a boy of twelve, in whose father, aged fifty-six, mother, aged fifty-three, and two brothers, aged sixteen and twenty, the arcus was very distinct. Middlemore says it occurs as early as forty, Laurence between thirty and forty, Sybel saw it in a man of thirty-two, Dixon in a girl of eighteen. Gross, in his *Pathology*, says: "The earliest age at which it usually occurs is fifty, although it has been observed in a few instances in young children."

Cardiac Hypertrophy in Adolescents.

The Paris correspondent of the *Lancet* writes that Prof. Germain Sée lately submitted a paper to the Academy of Sciences on Cardiac Hypertrophy occurring in youth, or during the process of the growth of the body. He endeavors to make out that this hypertrophy is merely the result of growth, and not of any morbid influence, consisting as it does in a simple increase in the numerical strength of the primitive fibrillæ of the heart, or, in other words, in the hyper-nutrition or hyper-sarcosis of that organ, accompanied with dilatation. There is, moreover, no fatty or fibrous degeneration, nor are the coronary arteries sclerosed, as is the case with hypertrophy resulting from disease. It is, however, difficult to say whether the lesion in question consists in true hypertrophy or in simple dilatation of the heart, as it generally disappears with the cessation of growth of the other parts of the body. Prof. Sée founded the subject of his thesis on eighty individuals, thirty of whom were youths aged from eight to sixteen years, and the others from sixteen to twenty-one, all being in other respects in a perfectly normal condition. In another class of cases—that is, in young recruits aged from seventeen to twenty, and who presented themselves for certificates for volunteer service—he found a great number who were the subjects of functional troubles or manifest lesions of the heart, as verified by auscultation and percussion. Professor Sée seemed to look upon this condition as almost normal in youth, and on that account did not consider that it incapacitated young men for military service. MM. Vulpian and Larrey, however, who had to report on the paper, did not take this view of the case, as they considered that hypertrophy of the heart, being an abnormal condition,

is incompatible with the exigencies of military service. This opinion was emphasized by Baron Larrey from personal experience of many years, and he stated that, as it would be impossible to say whether the cardiac hypertrophy would or would not disappear at the cessation of the growth of the individual, as suggested by Prof. Sée, he considered it advisable to reject the recruits who presented such a condition.

Electricity in Collapse.

Dr. Caspar Griswold publishes a paper on this subject in the *N. Y. Med. Jour.*, April 4, which terminates with the following conclusions:

1. Electricity *can not* be applied clinically in such a way as to stimulate the heart, literally speaking. In cases, however, where the heart is rapid, without much impairment in force, a mild current might be carefully applied over the pneumogastric in such a way as to restore the normal rhythm, and so increase the general efficiency of the heart's action. Cases are rare, however, where this would be indicated, rapidity and irregularity of the heart's action being generally associated with such feebleness as would contra-indicate any stimulation of the pneumogastric.

2. The application of one pole in the neck, and the other over the præcordial space, directs the current to the pneumogastric nerve, and retards the heart instead of stimulating it. A strong current applied in this way may stop the heart and kill the patient instantly.

3. An electric current applied over the phrenic nerve necessarily stimulates the pneumogastric at the same time. This measure, therefore, always threatens as much in the way of cardiac depression as it promises in the way of respiratory stimulation.

4. Liability of the heart to be stopped by pneumogastric stimulation is not increased in aconite, ether, or opium poisoning. It is, therefore, permissible to cautiously apply electricity over the phrenic nerve in these conditions.

5. In heart failure from chloroform, and when morphine has been injected into a vein, the heart may be stopped by even a slight current applied to the pneumogastric. The application of electricity over the phrenic is, therefore, strongly contra-indicated under those conditions.

6. And, finally, it is emphasized that under no circumstances should a current strong enough to contract muscles elsewhere in the body be suddenly or incautiously applied over the phrenic or pneumogastric, or anywhere in the neck.

Diabetes in a Boy Aged Seven and a Half.

Diabetes in children is so comparatively rare that all cases are worthy of record. Hence, we note that to the Liverpool Medical Institution (January 14, 1885), Dr. Whitford showed a boy, aged 7½, who was the subject of diabetes. He was the eldest of four children. The others were strong and well developed. When the mother was seven months pregnant of the boy shown, she was obliged to nurse her own mother, who was ill, and for three weeks was not able to go to bed. The labor passed off naturally, but at birth the child was very puny and wizened-looking; improvement set in when it was three weeks old, however, and at three months it was a healthy-looking child. It remained healthy on the whole until two years ago. At school he learned but slowly; later on he wetted his trousers and bed, drank and ate greedily, and was drowsy. He passed in October, 8, 9 and 10½ pints of urine *per diem*, of a sp. gr. of 1042. The quantity of urine passed gradually diminished until it reached two pints daily, but the sp. gr., which had kept at the same level nearly the whole time the child had been under observation, at last, and rather suddenly, went up to 1052. There was nothing pointing to intra-cranial mischief.

Dr. Joll stated that a patient of his was in India with her husband, and when seven months pregnant, her husband, when out hunting, was attacked with sunstroke. He became maniacal, and shot several policemen, under the delusion that they were pursuing him. The lady naturally suffered much distress, and returned to England. The child of which she was pregnant at the time—a boy—did well, and nothing abnormal was noticed till he was about seven years old, when he became diabetic. He wondered whether the intra-uterine life of the children had any bearing on the disease.

Dr. Carter said he had at the present time three children under his care, all diabetic; but they were improving, and he hoped they would eventually get quite well.

Treatment of Œsophageal Cancer.

From the *Med. Press*, January 28, 1885, we learn that at a recent meeting of the Clinical Society of London, Mr. Symonds, of Guy's Hospital, described a method of treating cancerous stricture of the œsophagus by means of permanently retained tubes. The case described was that of a man for whose relief gastrostomy appeared to offer the only feasible resort; but before proceeding to

make the opening, Mr. Symonds resolved to try whether a short tube could not be so arranged and introduced through the stricture as to admit of fluids being swallowed through it. The patient had been much distressed, also, by his inability to swallow saliva, and his rest had consequently been greatly disturbed. The instrument devised by Mr. Symonds consists of the terminal six inches of a rubber catheter, to the upper end of which a slightly-dilated funnel is attached, and to this latter a silk thread. The whole apparatus is passed carefully back to the pharynx and œsophagus, and well through the stricture, the lower open end either passing into the stomach or nearly so. The free end of the silk thread is fastened securely round one ear of the patient, and the tube removed, when required, by its means. At first tubes of ivory, hard wood and silver, were tried, but it has been found that rubber stands as well, and is as safe and comfortable as any other material—the man at the present time having in one of this description, which was inserted ten weeks since. It is of the calibre of No. 10 catheter, and permits of thick fluid being swallowed with ease and comfort, while the taste is also enjoyed. This plan is an unquestioned improvement on the usual one of feeding by a stomach tube, and its extension seems to offer many prospects of high benefit. Future experience alone can prove how far the application of this method must be confined to cases in which the stricture is below the level of the cricoid cartilage. Mr Symonds is himself sanguine that it may be found of service for even those of a post-laryngeal character.

Cocaine in Cancer.

What next? When will we stop hearing of some wonderful new property inherent in cocaine? Dr. J. Sinclair Holden would have us believe that it possesses certain powers over cancer. In the *Brit. Med. Jour.*, February 21, 1885, he reports the following case:

"An old farmer came to me lately with an epithelioma on the third finger of the left hand; it had passed into the fungoid stage, and was growing rapidly, being about the size and shape of a cherry, covered with a black leathery crust. As I had before successfully removed these growths by following Dr. Marsden's plan of treatment by arsenical mucilage, I applied it in this case. My patient was a very difficult one to manage; he could neither endure much pain, nor take morphia; so that, after two short applications, very little progress was made, except that the base of the tumor was becoming inflamed, and that I was able to detach the hard crust. Another and final application was necessary. This he dreaded very much; I therefore scraped the tumor down to the raw bleeding surface, and soaked it for fifteen minutes in a four per cent. solution of the hydrochlorate of cocaine, and then applied a thick coating of the arsenic. I was pleased to find that he had actually no pain for six hours, and was able to bear it for six hours more, when he took the lint off, and poulticed; the latter he continued doing for three days, when the tumor came away as a slough, leaving a clean, healthy cavity, which is now healing satisfactorily.

This plan of effectually destroying small cancerous tumors is one of great value, and in many respects superior to excision. The only drawback is the excessive and prolonged pain; if this can be diminished by cocaine, as in the above instance, it will be a very great advantage.

Hereditary Syphilitic Affection of the Joints.

In the *Arch. f. Klin. Chir.*, xxxi., p. 228., Dr. P. Güterbock reports the following interesting case:

A weakly boy, æt. 18 months, was said to have suffered during the first six weeks of his life several times from an eruption of the skin simulating chicken-pox. When brought to G.'s clinic the boy showed a small papulo-squamous syphilide, and an unimportant bony defect in the left ulna; the left arm was carried as if paralyzed; the elbow-joint, though there was no change in the appearance of the skin, evinced decided swelling, attacking partly the joint itself and partly the surrounding tissues; an enlargement of the epiphyses of the bones was also demonstrated. In a somewhat less degree the right knee-joint also suffered, and the head of the fibula was unmistakably enlarged. By the use of sublimate baths, all joints completely recovered their functions, and with the exception of a small swelling of the epiphyses of the left elbow, a general normal condition of the affected parts set in. A month later a relapse occurred, and yielded to the same treatment, after which the child continued in apparently good health.

G. mentions that the peculiar paralyzed condition accompanying the swelling of the joints seems to be a diagnostic point in the cases of hereditary syphilitic affections of the joints. The epiphyses are almost always swollen. Several other points are of value in the diagnosis. Scrofulous or tubercular disease of the joints in childhood yields only to surgical treatment; rheu-

matic affections are influenced mainly by salicylic acid and its salts, while only those joint troubles due to syphilitic diathesis are rapidly healed by the proper treatment. G. finally advises never to proceed to an operation in doubtful cases, until an antisyphilitic treatment has been given a fair trial.

Poisoning by Colchicum.

The *Lancet*, March 21, 1885, says:

A case of suspected poisoning by colchicum is just now attracting some attention in Paris. The accused is a person named Ribout, an artificial flower maker; and his wife having died suddenly, it was suspected that he had made away with her in order that he might marry his mistress. The remains of Madame Ribout were accordingly disinterred, and were submitted to a long and careful examination by M. L'Hôte, the chemical expert attached to the Paris Criminal Court. It is said that indications of the presence of colchicum were discovered, and that little doubt could be entertained that the unfortunate woman met her death from the administration of poison. It has long been known that meadow saffron is a powerful toxic agent. As far back as 1839 the case was recorded of a gentleman who took an ounce and a half of colchicum wine by mistake, and died in four hours. The symptoms are usually severe, and fairly characteristic. At first there is burning pain in the stomach, with persistent vomiting and purging, the stools being mixed with blood. Irritation of the throat and intense thirst are soon added. The patient suffers from great prostration, pain in the head, a small, weak or irregular quick pulse, muscular twitchings, and severe pains in the extremities and joints. In some instances the symptoms have been not unlike those of malignant cholera. At the post-mortem examination the stomach and intestines are usually found to be greatly inflamed, and purple patches are sometimes noticed on the skin and internal organs. A curious case of poisoning by "gout pills," composed chiefly of colchicum, was recorded in the *Lancet* of March 15, 1881.

Temperature in Diabetes Mellitus Due to Cerebral Lesion.

The view has now been generally adopted by authorities that there are two main varieties of diabetes mellitus, at least as far as the pathogenic cause is concerned. One seems to be primarily due to disturbance of the function of the liver, while the other can always be traced to an original morbid condition of the brain. As well known, the latter variety can be easily produced in animals by pricking the floor of the fourth ventricle, where the nucleus of the pneumogastric nerve is situated. Dr. Ed. Aronsohn has recently made a number of experiments to determine the influence which diabetes, thus artificially produced, may have upon the temperature of the interior of the organism, and especially that of the liver (*Deutsche Med. Woch.*, '85, 16). The results obtained by him in these investigations show that if the experiment is correctly executed, *i. e.*, without injuring neighboring parts of the brain, the temperature declines within two hours about 3 degrees F. in the liver, the muscles, and the intestines. If neighboring brain-tissue has been accidentally injured, the temperature first falls for a short time, and then returns to the normal. When the experiment totally failed, *i. e.*, when only the pons or the sides of the medulla oblongata were pricked by the needle, the temperature at once rose 1–2 degrees F.

Intravenous Injections in Cholera.

Dr. Hayem, the well-known French medical writer, has published his experience during the late cholera epidemic in France in the *Bull. de l' Academ. de Méd.*, 1885, 17. He was attached during this period to the St. Antoine Hospital, and he is greatly in favor of intravenous injections. Of about 100 cases of Asiatic cholera, he is positive to have saved the lives of 20 by this method. The solution which he usually employed was the following: Distilled water 1 litre, chloride of sodium 80 grains, sulphate of sodium 160 grains. This solution was first filtered, and then heated in the water bath up to 38° C. The quantity mentioned was used in children; in adults double the amount was injected within from 12 to 15 minutes by the aid of a transfusion-pump.

It may be that there is some virtue in this method of treating cases of Asiatic cholera during the stage of collapse; but considering that the last epidemic in Paris, during which Hayem gained his experience, was by no means a very fatal one, the results obtained by him—saving 20 per cent.—were not extraordinarily favorable, especially as he does not say that the 100 cases had been of grave nature.

—In an exhaustive article in the April number of *The American Journal of the Medical Sciences*, Dr. Charles A. Oliver, of Philadelphia, further tests the correction of the theory of color perception, which he propounded in the preceding issue, by the pathological data at our command.

CORRESPONDENCE.

Washing the Baby.

EDS. MED. AND SURG. REPORTER:—

I hope I will not be considered rude or egotistical in offering a few hints in a friendly criticism on Dr. G. A. Hill's article on "Some of the Common Disorders of Infancy and Early Childhood," which appeared in the REPORTER, February 7, 1885.

My object is not specially to give my own views and experience on the subject, but to encourage a progressive man, who labors to correct some of the absurd customs and practices of the age.

Dr. Hill calls our attention to an important matter when he says, "I think it is the duty of the physician to have a watchful care over the very first handling" of the infant, and I hope he will still further extend his practice in that direction.

Why the disposition of the profession to follow useless ancient customs, I cannot conceive, unless it be from negligence, old-fogy ideas, and the fear of adverse criticism from ignorant nurses and prejudiced mothers.

I am of the opinion that far too many medical men quit the lying-in-room perfectly indifferent to the proper needs of the little one.

With scarce a word of advice, they leave it to the care of an uninstructed nurse, who has to resort to her own ideas of treatment or follow some ancient superstitious tradition for a guide.

In your instructions to us, doctor, you say, "The nurse should receive the infant in a very soft piece of flannel, carefully warmed, and proceed at once to wash it; before applying the water it should be thoroughly anointed with melted vaseline; this bland soothing material is well calculated for the purpose, mixing easily with the caseous substance on the head and in the folds and flexures of the body, and is afterward readily removed by neutral soap, leaving the skin soft and not liable to become chafed." To a portion of this advice allow me to take an exception.

You begin the ablution of the infant by applying an oleaginous substance; that is, you first wash it with grease, an article which you consider necessary, really a prerequisite, in fact, to mix with and remove the adherent caseous matter. I therefore infer you believe soap and water unsuited for that purpose.

Yes, in that you are correct. The grease dissolves the vernix, and if properly applied, and sufficient time be allowed to elapse for the solution of the substance, the surface can then be readily and effectually cleansed by subsequently wiping with soft flannel.

Now, if the soap and warm water will not primarily do the work, or answer the end in view, wherein is the necessity for their use? Why, then, resort to agents of power which are not only absolutely useless, but positively injurious.

They must be useless, when you find they will not fulfil the indication required of them, and cause you to resort to the aid of another media for that purpose. It is plain, therefore, they can be dispensed with.

That they are injurious, any intelligent medical man can satisfy himself by accurate observation. I submit the following points:

The heat from the warm water contracts the cutaneous vessels, and the evaporation of the moisture chills the surface. Incident to this is the prolonged manipulation during the bath, under the absurd impression of having the body particularly clean.

The length of time thus consumed in first applying grease, then soap, followed by the process of rubbing and scrubbing with cloth and warm water to remove the natural and artificial coatings, so prolongs the exposure of the nude body in a temperature much less than that of the infant previous to birth, that a shock follows which require hours for reaction. As a result of this, see the cold and blue extremities, see the shivering body.

Following the shock is a congestion of delicate vital organ or organs, terminating in some form of catarrhal or other disease.

Possiby you may claim that by allowing the grease to remain a few hours unwashed from the surface, there may be an obstruction to the cutaneous transpiration. Should such be a fact, however, would it not be of infinitely less danger than that of removing it as you do?

Again, if we claim the initial warm-water bath a necessity, what reason do those people give for their practice who roll the infant in the snow?

To the assertion that a neutral soap and warm-water bath leaves the skin soft and not liable to become chafed, I disagree.

Can you assure me that strophulus, the red and white gum of the laity, is not the result of that soap and warm-water bath? Are not other cutaneous diseases also the result of that process? How many persons procure a neutral soap, or know when they have it?

If there is a valid or plausible reason why the first bath shall be soap and water, particularly warm water, I hope some one will elucidate the subject for me.

"After the washing, the physician himself should dress the cord stump, for to be rightly done, it is no unimportant matter. A soft linen or muslin roller, a little wider than the length of the stump, some mutton tallow, and a string, are all that are needed. The nurse holding up the cord by the end, the tallow is applied to the navel, and the roller is carried several times around it and secured with a string."

The result of this manipulation will be a moist, discolored, offensive, unsightly dressing.

Let art step aside in these instances and receive a lesson from nature. Allow the stump to dangle undressed, and you will be pleased to see how nicely it will dry, nearly devoid of fetor, and coil up against the abdomen, trammeling you less than the method you recommended.

After a thorough application of grease, either lard or vaseline, a soft loose flannel gown to envelop the body, and a napkin about the hips, is the proper dressing, dispensing with shirts, skirts, and bands. In twenty-four or forty-eight hours it can have its first tepid-water bath, which is to be gone through with quickly, with little or no soap.

This is followed from day to day, until the stump falls, when I resign the charge to pride and fancy clothing.

The REPORTER did me the honor of publishing

an article on this subject January 30, 1880, and I had the pleasure of reading an extract from the *Medical World* published in the *Obstetric Gazette*, November, 1884, detailing a similar plan followed in the Maternity Department of the Philadelphia Woman's Hospital.

The learned gentlemen in that institution also sponge the eyelids with an antiseptic solution as soon as the head protrudes, and remove the unsevered placenta in a proper receptacle from the maternal couch with the infant.

W. J. Craigen, M. D.

Cumberland, Md., April 7, 1885.

Reduction of Funis Readily and Easily Accomplished.

Eds. Med. and Surg. Reporter:—

During an active practice of over twenty-one years, and a record of about four thousand full-period deliveries, I have necessarily met with almost every known difficulty that can confront the accoucheur. I do not know of any condition of things in the "lying-in chamber" (except puerperal eclampsia and placenta prævia) which gives rise to graver fears on the part of the accoucheur than the discovery of a funis presentation; for every other condition being favorable, he is confronted with the stern fact that he is liable to have a still-born child as the result, and thus justly or unjustly have to bear the odium attached to the case by the regretful parents, whom no amount of explanation would wholly satisfy. There have been a number of methods and means suggested for the reduction of the escaped funis, which have been resorted to by every accoucheur with more or less success—myself among the number. Many a time have I labored unsuccessfully with a "rebellious funis," when no sooner would I succeed in replacing one portion than another would slip down, and thus render futile all my previous efforts—this more especially when the cord was *extra long;* and another difficulty is its slippery character, which makes it impossible almost to hold.

During the past year I have resorted to a new plan, which obviates the (disagreeable) necessity of putting the patient in any position other than on the side or back, and furthermore, renders instruments improvised for such purposes unnecessary—a very important point, since the very mention thereof, not to speak of their exhibition, has such a depressing and alarming effect on such a large majority of patients.

This plan, which I have tried successfully in the last eight cases I have met with, is as follows: Introducing the index finger into the most distal loop of the escaped portion, and slowly twisting the cord upon itself, you will in a very short period of time bring the object into a shape which can be readily seized by the fingers and replaced above the brim of the pelvis, meantime keeping the hand in vagina until head of child engages and prevents any further prolapse. The tendency of said cord (like rubber tubing so treated) is to immediately unwind. I cannot better illustrate my remarks than by relating the history of the last case, which occurred on the 10th of April. Mrs. McD., multipara, fourth child, the three prior to which had been delivered by forceps, on account of contracted brim of pelvis, all three being dead at time of this birth. A great deal depended on this fourth child being born alive. I was sent for at 8 o'clock in the morning, and failed to arrive until about 10 o'clock, when I was informed by the mother that the water had broken at 8 o'clock, and that she had pretty severe pains ever since.

Upon examination, I found, to my chagrin, a forearm and funis in the pelvic cavity, the pulsation in funis being almost imperceptible. I immediately gave a fluid drachm of squills, fluid ext. ergot, and introducing my entire hand into the vagina, replaced the arm, and placing my finger in the loop of the cord, I twisted slowly until the presenting portion was reduced to a ball-shaped mass, easily seized between the fingers, and I then shoved it gently back above the brim of the pelvis, the hand in the meantime being kept in the vagina until the head became engaged. Pains came on very regularly and severely, and after waiting two hours, the head failing to descend on account of contraction of brim above-mentioned, and a caput succeddaneum forming; at 12 m., I applied forceps at superior strait, and completed the delivery of a living female child, much to my satisfaction and the unspeakable joy of the parents.

I hope that my suggestion so readily carried out, and dispensing with so much that may be disagreeable and distressing to the patient, may prove as successful to others as it has to me.

Daniel E. McSweeny, M. D.

New York City.

Circumcision Under Peculiar Circumstances.

Eds. Med. and Surg. Reporter:—

The following case occurring recently in my practice seems worthy of note:

Patient, male, aged 25, came to my office with history of recent syphilitic contagion, presenting following symptoms: Penis swollen to twice its natural size, foreskin drawn tightly over glans penis, with an extensive discharge emanating from under the foreskin, inguinal glands enlarged, and all evidence of syphilis. I undertook to retract the foreskin to examine the condition of the glans, and found it impossible to do so; and in fact, twenty-four hours of constant antiphlogistic treatment failed to subdue the inflammation sufficiently to retract the skin. As time was limited, on account of evident serious work of the syphilitic ulcers, I determined to perform circumcision. The patient being intelligent, and having considerable pride also, consented to operation, but would not allow me to have any assistance whatever, and consequently could take no anæsthetic, but preferred to "bite a nail" and bear it. Accordingly, I turned the key in my office door, patient sat down, and I performed the operation of circumcision straightway. Found considerable destruction of tissue from the rapid ulceration; the ulcers were immediately put under treatment, and I had the satisfaction of seeing my patient make a good recovery in due time, and he also the satisfaction of knowing that it was all done and cure made without the knowledge of any

third party. I would say that my patient not only bore the operation without flinching, but acted in capacity of assistant, holding instruments, etc., his pride and terror of any one knowing it outside of myself keeping him up and giving him the will-power to do so.

Union City, Pa. C. G. HOLLISTER, M. D.

NEWS AND MISCELLANY.

The Treatment of Patients in the Temples of Æsculapius.

The *N. Y. Med. Jour.* (March 28, 1885,) tells us that before the New York Academy of Medicine, Prof. Merriam, of Columbia College, by special invitation, read a paper with this title. In his introductory remarks he said he thought we were too much inclined to judge of the views of the ancients concerning the means of healing the sick from the standpoint of the medicine of the nineteenth century, which, of course, was an injustice; nevertheless, it was amusing now and then to read a passage in which it appeared that it pleased the ancient deity to cure the sick in a more than usually ridiculous manner. Certain facts concerning medicine from the sixth century B. C. down to the fifth century of the Christian era, already recorded in medical literature, were mentioned, but the author dealt chiefly with new discoveries made during excavations of the temples of Æsculapius at Athens, Epidaurus, and Cos. On one of the slabs recently unearthed was a long list of diseases said to have been cured by miraculous interposition, a complete translation of which was read. This belief in miracles in the cure of disease by the ancients of the Oriental countries existed among the inhabitants of the same countries at the present day, the difference being that the virgin and the saint had been substituted for the temple of Æsculapius. There were some unbelievers then as there were also at the present time. Three hundred and twenty temples of Æsculapius were known to have existed in antiquity.

Dr. John C. Peters referred to the studies of ancient medicine by the late Dr. John Watson, and also by himself. He thought it had been shown that Hippocrates was not given to the tricks and deceptions practiced at the temples of Æsculapius. He referred to certain evil customs existing at present in Egypt and certain parts of Asia which were similar to those existing in the ancient temples of Æsculapius.

The Hygiene of Colleges.

The *N. Y. Med. Jour.*, March 28, says that a recent number of the *Progrès Médical* contains a vigorous article on this subject, in which a dismal picture is drawn of the dangers which threaten the health of the French youth during his college career. "It is at college," says the writer, under the influence of its detestable physical and intellectual hygiene, that many children contract the germs of disease, which break out during youth or mature age." The writer is not very clear as to the exact character of these noxious influences, since he speaks in one sentence of bad water-closets, and in the next of excessive mental strain. We heartily agree with him in his strictures upon the improper ventilation of recitation-rooms. Many an American's reminiscences of his college days are not without certain memories of low, dark chambers, which were better adapted for coal-cellars than for class-rooms, in which thirty or forty young men were obliged to inhale one another's foul exhalations for an hour at a time. And then our medical schools—God save the mark! But here we "come too near home." We can readily imagine the impression produced upon a tender parent (such as our French *confrère* describes) who should visit some of our most venerable institutions, in order to decide as to which one offered the most favorably hygienic surroundings for his hopeful son. But, jesting aside, would it not be a good plan for our medical schools—we do not criticise the collegiate institutions, for they are improving—to make a few concessions to the growing want of fresh air? With their increasing means, several lecture-rooms might be provided, so that the students would not be obliged to breathe the same stifling atmosphere for two hours or more at a time. If the tradition in favor of ill-ventilated medical schools is too strong to be easily overcome, perhaps an alternation of miseries might render them more endurable. Even a dull lecture is enlivened by an occasional breath of the outer air.

More Truth Than Poetry.

The *Med. Press*, (February 4, 1885,) very truly says as follows:

Amidst the mundane and grovelling considerations of fees and other hum-drum incidents of medical business, it is a truly blessed feeling for the working doctor to look in upon his breast and realize that, without knowing it, he is an incarnate combination of self-sacrificing philanthropy and ordinary business capacity.

If any of our readers have never realized their beatitude, we commend to their reading the following assurance from the mouth of a president, who compliments his audience in the following phrases:

"That which is but the occasional luxury of others—the relief of pain, the mission of mercy above all distinction—is our daily task. *We* truckle to no caprices of power or fashion; *we* acknowledge no worldly dependency, but follow in freedom a life at once useful and bountiful to others, elevating and independent for ourselves. Gain is but the incident, not the essential of *our* handiwork, because our true *honoraire* is the memory of insufferable pain relieved, the rescue of valued lives from danger, the restoration of fathers and mothers to their children, and the saving the little ones that seemed doomed to die."

Such a view of doctoring is very gratifying, but we suspect that most doctors—editors included—look upon the "incident" of gain as not the least part of their reward of labor, and that when a good public appointment is vacant, even *we* may violate the rule which prohibits our "truckling to the caprices of power or fashion."

This sort of peroration is neat and self-satisfying, but it is nonsense. *We* are just no better

and no worse than our neighbors, and we shall not succeed in persuading the world that we are even if we delude ourselves into the idea.

A Caution to Experts.

We have already referred to the Spitzer case, and as a sequel we now note from an English exchange that the affair has excited much sympathy in Germany. It will be remembered that Dr. Spitzer was fined and suspended for a time from practicing, for causing gangrene of a hand by the application of a solution of iodine and collodion to a swelled joint of one of the fingers. Appeal was of course made, and the decision of the first court reversed, but, in the meantime, Dr. Spitzer committed suicide. At the last meeting of the Medical Society, at Berlin, a great discussion arose on the effect of the remedy employed by Dr. Spitzer on the skin, and feeling rose very high between the members. Prof. Weinlechner first spoke. He said: "In the Spitzer case I was called by the prosecution to give my opinion as an expert on the solution of collodion and iodine employed. In accord with two of my *confrères* well versed in forensic medicine, I declared that the painting of the little finger with the liquid had provoked gangrene. The accused having appealed, the Faculty of Medicine made several experiments, with the result that the incriminated liquid was declared inoffensive.

"The Court of Appeal reversed the judgment of the first court, and it is now easy for any one to see that this act constituted a reproach which concerns me in my position of surgeon. It was admitted by one of the experts (medical) that collodion applied in a ring form around a finger might cause gangrene, and I was determined to examine minutely into the effect of the solution, and having had brought to me a child with a supernumerary digit, I applied seventeen times a solution of iodine and collodion, the same strength as used by Dr. Spitzer, that is to say, 1 in 100. There is not yet any appearance of gangrene, but I am certain it will not fail to set in shortly."

M. Dittel, one of the committee which pronounced it in a contrary sense, considered that the professor had not made out his case, and that their opinion could not be altered.

M. Albert, secretary of the committee, said that he had sought in vain in books for warning against the action of collodion, and he interrogated several leading medical men, all of whom replied that they never saw nor heard of a case of gangrene produced by it.

After some angry remarks by the professor, the discussion ended.

A pendant to this affair is reported from Bohemia. A Dr. H. was called to see a child who was suffering from dislocation of two of the carpal bones of the right hand, with external wound. The proper dressing was applied, and in two days the doctor returned and renewed the treatment. On the following day symptoms of gangrene set in, and other medical men being called, declared that their *confrère* had drawn the bandage too tightly, and that amputation was necessary. To this the parents refused to submit, and the hand dropped off in a few days. Dr. H. was prosecuted for negligence, and condemned to again undergo his examinations and pay damages to the parents. He appealed, and the Faculty of Prague having sustained him, he was acquitted.

American Surgical Association.

The annual session of this Association was held in Washington, April 21, 22, 23, and 24. The president's address was delivered by Dr. William T. Briggs, of Nashville, after which the following papers were read:

"A Device for the Purification of the Air of Rooms used for Operations," by Dr. David Prince, of Jacksonville, Ill.

"The Field and Limitation of the Operative Surgery of the Human Brain," by Dr. John B. Roberts, of Philadelphia.

"Nephrectomy, its Indications and Contra-Indications," by Dr. S. W. Gross, of Philadelphia.

"Nephrolithotomy," by Dr. L. McLane Tiffany, of Baltimore.

"The Healing of Arteries After Ligation," by Dr. J. Collins Warren of Boston.

"The Etiology of Tetanus," by Dr. P. S. Conner, of Cincinnati.

Official List of Changes of Stations and Duties of Medical Officers of the United States Marine Hospital Service, for the week ended April 18, 1885.

Yemans, H. W., assistant surgeon. Detailed as medical officer revenue steamer "Corwin," during cruise, April 16, 1885.

Battle, K. P., assistant surgeon, when relieved to proceed to New Orleans, La., for duty, April 13, 1885.

Brooks, S. D., assistant surgeon. Granted leave of absence for ten days, April 16, 1885.

Items.

—In an examination on physiology some years ago at South Kensington, the question was put, "What is bile and what are its uses?" One candidate's answer was, "Bile is formed in the stomach, and is used for cleaning carpets."

—The *Obstetric Gazette* says that, in a case of dysmenorrhœa, very sensitive to the use of a sound, by lubricating the instrument with cocaine ungt., there was no further trouble in its passage.

—Dr. Szpilmann (*Berichte Deut. Chem. Gesselschaft*) finds that air, and still more pure oxygen, promotes the multiplication both of the bacilli of anthrax and those of putrefaction. Ozone, on the other hand, is fatal to the latter, but has no injurious action upon the former.

—Andeer (*Prager Med. Wochenschr., Centralbl. f. Klin. Med.*) calls attention to the fact that pure resorcin, in carefully-regulated doses, possesses valuable hypnotic properties. He has employed the drug in several cases, with good results.

—*Apothecary:* "Well, what do you want, what is it?"

Traveler: "Mr. Karr, I'm in a hurry."

Apothecary (furious): "Missed a car! What in thunder do you come to tell me about it for?

Don't you know enough to stand still and wait for the next one?"—*Life.*

—Powdered rice as a styptic remedy has a great effect on fresh wounds, much superior to oxide of zinc. By mixing from four to eleven per cent. of it with lint, and using the lint thus treated as a compress, it is very effectual and more valuable than subnitrate of bismuth, salicylic acid, or carbolic acid.—*Rundschau*, and *Exchange.*

—In the *Meditz. Obozrenie*, No. 21, 1884, p. 808, Dr. P. G. Rosanoff, of Zvenigorod, records a case of chronic hydrocele, in which complete cure ensued after wearing a well-fitted elastic bag for about six weeks. An examination of the patient about fifteen months later showed that he was still entirely free from the former disease.

—M. Monin (*Union Méd.*) recommends the following solution to be applied to the soft palate and back of the pharynx, for the relief of the irritative cough due to the elongation of the uvula:

Hydrochlorate of morphine,	4 grains.
Bromide of potassium,	1 drachm.
Tincture of coca,	2 drachms.
Glycerine,	1½ ounces.

—A collection of interesting documents relating to the life of Panfilo Custaldi, for whom the honor of the invention of printing has been claimed by patriotic Italians, have recently been discovered, and will shortly be published in the *Archivio Storico per Trieste, l'Istria, ed il Trentino.* It is not stated that these documents give any support to the claim above alluded to; but it appears that Custaldi, who was a physician practicing in Capo d'Istria, was already practicing the art of printing with movable types as early as 1461, in partnership with two other residents in the same town.

—According to a law recently passed in the French Parliament concerning the elections to the Senate or to the Chamber of Deputies, no member of either body can at the same time hold any other official appointment under Government. Professors Charles Robin and Cornil, who have been recently elected as Senators, will have to choose between the Senate and the respective chairs they now occupy at the Paris Faculty of Medicine, the former as Professor of Histology and the latter as Professor of Morbid anatomy. It is anticipated that M. Robin will retire from his professorial chair; and it remains to be seen what will be the decision of M. Cornil, who is regarded as the favored candidate for the Professorship of Histology.

—At the recent meeting of the Tennessee State Medical Society, held at Nashville, the following officers were elected for the ensuing year:

President—Dr. Thomas L. Maddin, of Nashville.
Secretary—Dr. C. C. Fite, of Nashville.
Treasurer—Dr. Deering J. Roberts, of Nashville.

—At the recent meeting of the Alabama State Medical Society the following officers were elected for the ensuing year:

President—Dr. F. M. Peterson, of Greensboro.
Vice-Presidents—Dr. Starr, of Wilcox county; and Dr. Richard M. Fletcher, of Madison county.
State Board of Censors—Drs. Riggs, Dement, and Ketchum.
Councillors—Drs. Herbert, Goodwin, Bragg, J. B. Kendrick, Norris, Wheelan, Nicholson, Lowry, and Inge.
Members of the State Board of Health—Drs. Riggs, Ketchum, and Dement.
Orator—Dr. Bragg, of Lowndes.

The Association voted to meet at Anniston next year.

—Professor Sigmund Exner, in his work, *Die Innervation des Kehlkopfes* (Vienna, 1884), announces the discovery of a third laryngeal nerve—*nervus laryngeus medius.* This nerve is derived from the pharyngeal and laryngeal plexus formed by the pharyngeal branch of the vagus with other nerves, and enters the crico-thyroid muscle, which is also supplied by the external branch of the superior laryngeal nerve. The interarytænoid muscle is supplied by both upper and both lower laryngeal nerves, and, generally, each muscle is innervated by several nerves. The above conclusions are deduced from three lines of research:

1. Irritation of nerves in living animals.
2. Degenerations of nerves after section in living animals.
3. Examination of the larynx in children (post mortem).

—General Grant was able from his past military experience "to put himself in the place" of his medical attendants to good purpose. His reported remark to his physicians savors of true wisdom: "The doctors outside, I am informed, are writing about my case and talking about it, and some of them seem to think they know more about it than you gentlemen do; but it is like a time of war, when the men at home think they know more about it and how to do it than the generals who are in the field fighting."

QUERIES AND REPLIES.

Moon Blindness.

Dr. H. N., of Pa., reports a case of a man with what is popularly termed "moon blindness," and asks for a scientific explanation of the disease. A moon-blind person can see well enough by daylight or lamplight, but in the moonlight can see nothing but the moon and stars, terrestrial objects being quite imperceptible to him. Dr. N. thinks there were no fraudulent statements in the case.

Dilated Heart.

Dr. V. G., of Mexico, inquires what latitude, climate, and barometric pressure are most suitable in passive dilatation of the heart. The fact is proved by the British statistics, that a damp, cool, equable climate, on or near sea level, is the most favorable for such cases.

Please state in the columns of your journal how colorless iodine is prepared, and whether its action is interfered with by its being made colorless. G. G. Blank, V.S.

Dr. X., of N. C., asks whether solution of cocaine develops animalcules? We shall be glad to publish observations on this point.

DEATH.

VEIRS.—April 5, 1885, in Jersey City, Dr. Charles O. Veirs, aged 44 years.